

A BASIC PLAN FOR

HEALTH EDUCATION

AND THE

SCHOOL HEALTH PROGRAM

Issued Jointly by

VERNON L. NICKELL, Superintendent
Office of Public Instruction

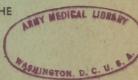
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STATE OF ILLINOIS
DWIGHT H. GREEN, Governor



The companion volume to this report, prepared by the Illinois Joint Committee on School Health, is entitled A Basic Plan for Student Health and Health Education in Teacher-Training Institutions.



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ILLINOIS, JOINT COMMITTEE ON SCHOOL HEALTH

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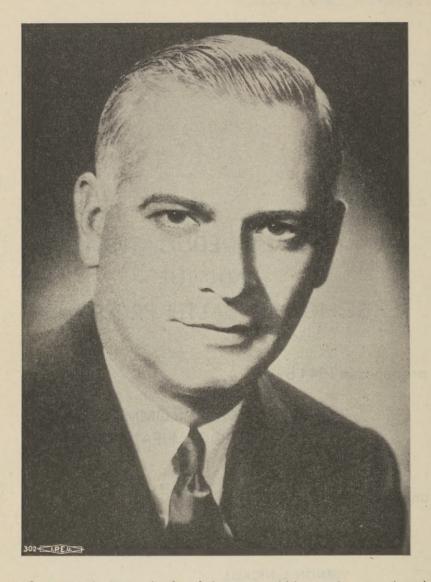
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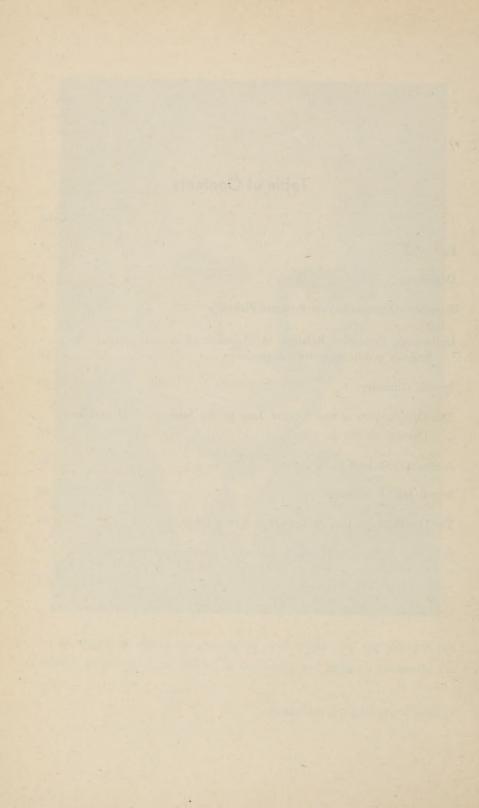
In war or in peace, the foundation upon which rest the strength and welfare of the State and Nation is the health and physical stamina of the people

DWIGHT H. GREEN, Governor



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Foreword . . .

This report comes to you from three agencies of your State Government, and represents the work of the committees listed herein. It was prepared for the use of local communities in planning their own programs of school health and health education. It is believed that local planning committees like those suggested on another page will find this document to be of such nature, scope, and detail as to form a helpful framework within which the program for the individual county or community may be built. This report is a guide and not a graded course of study.

Effective programs and curricula are best prepared at the local level with the participation of the health personnel and teachers concerned. This report recognizes the school health program as an important element in a community-wide program of health education. It presupposes the cooperation of local official and voluntary health agencies. Insofar as possible, staff members of the three State agencies concerned and the members of the continuing Illinois Joint Committee on School Health and its Liaison Committee will assist in the development of local programs. The five State Teachers Colleges and Normal Universities and the University of Illinois will gladly assist schools in their respective areas when possible.

The proposals herein are intended to be helpful and suggestive rather than rigid and dogmatic. A basic plan such as this should be revised from time to time as the science of school health progresses. Suggestions for such revision from those using the report will be welcomed by the three State agencies concerned, and may be addressed to the Joint Committee's Chairman.

We would like to express our appreciation to the consultant, Professor Clair E. Turner; to the committees; and to the many other individuals who gave valuable assistance in the preparation of this report.

ROLAND R. CROSS, M.D., Director Department of Public Health

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Definitions of Selected Recurrent Terms Relative to Health Education*

Health education is the sum of experiences which favorably influence habits, attitudes, and knowledge relating to individual, community, and racial health.

School health education is that part of health education that takes place in school or through efforts organized and conducted by school personnel.

Hygiene is the applied science of healthful living; it provides the basic scientific knowledge upon which desirable health practices are founded.

Sanitation is the application of scientific measures for improving or controlling the healthfulness of the environment.

Health in the human organism is that condition which permits optimal functioning of the individual enabling him to live most and to serve best in personal and social relationships.

Health instruction is that organization of learning experiences directed toward the development of favorable health knowledges, attitudes, and practices.

Health service comprises all those procedures designed to determine the health status of the child, to enlist his cooperation in health protection and maintenance, to inform parents of the defects that may be present, to prevent disease, and to correct remediable defects.

Healthful school living is a term that designates the provision of a wholesome environment, the organization of a healthful school day, and the establishment of such teacher-pupil relationships as make a safe and sanitary school, favorable to the best development and living of pupils and teachers.

Health examination is that phase of health service which seeks through examination by physicians, dentists, and other qualified specialists to determine the physical, mental, and emotional health of an individual.

Physical education is that phase of the school program which is concerned largely with the growth and development of children through the medium of total body activities. Briefly stated, the objectives of the physical education program are the protection and improvement of health; the development of neuromuscular skill and motor fitness; the development of desirable social attitudes and standards of conduct; and attitudes in physical education activities which will contribute to wholesome and enjoyable leisure pursuits.

^{*} The first definition listed is by Dr. Thomas D. Wood, in the Fourth Yearbook of the Department of Superintendence of the National Education Assn., 1926, page 226. The last definition is adapted from a statement presented by the State Society of Directors of Physical and Health Education. The other definitions are from the Committee Report, Health Education Section, American Physical Education Association, Journal of Health and Physical Education, December 1934.

Suggested Organization for Program Planning

The school health program of each school system and the health education program in each community must be developed locally. This report is prepared primarily for the use of local planning committees. The following suggestions describe desirable procedures in organizing and conducting the school health and health education program:

- The Community Health Committee or Council. Steps toward increasingly effective community organization for health education have already been taken spontaneously and independently by many widely separated communities in Illinois and in the Nation. The initiative has come variously from school systems, public health departments, private health agencies, or interested non-professional civic leaders. The basic plan toward which the experience of such communities seems to point is the development of a permanent Community Health Committee, or City or County Health Council, which carries on a continuing cooperative study and gives impetus to the program. With the guidance of the school administration and the health officer such a committee or council, composed of representatives of all interested groups in the area, including the medical and dental professions, may go far toward ensuring the continued growth of the school and community health program. Many areas find it possible to appoint one individual to coordinate health education activities along lines discussed in the report under the section on School and Health Department Relationships.
- II. The Health Committee or Council of the School System (Curriculum Committee).

It is hoped that each local Illinois school system, city or county, will plan, through appropriate committee organization, its own detailed school health program and health education curriculum. Such a committee, under the leadership of the school superintendent, should have a membership representing principals, supervisors, teachers, and health specialists, including in the latter group the full-time local health officer if there is one, and other health specialists from the health department in areas where the health department furnishes school health services. Representatives of other cooperating agencies may also serve effectively. The local program needs to be planned with locally desired adaptations, and with an amount of detail which cannot be included in the basic plan proposed in this publication. This publication does not undertake to set forth a graded program of health instruction nor detailed methods of procedure.

III. The Health Committee of the Individual School.

In addition to the central program-planning or curriculum committee, it may be desirable for each school to have a staff health committee. In the secondary school, student participation will also be desirable. This committee in the individual school will be concerned with the implementation of the local curriculum to make sure that plans are effectively carried out, that undesirable duplication is avoided, and that continuous progress is made.



Underlying Principles Relating to Administration, Educational Procedures and Cooperative Relationships

The Place of the Health Program in the Program of General Education—The Key Position of the Classroom Teacher in Health Education—Teacher-Supervision and Guidance in Health Education—Relationship of Health Instruction to Other School Experiences—Relationship of School Health Education to Community Health Education—Implementation of the Program Through the Health Committee or Council—School and Health Department Relationships.

I. The Place of the Health Program in the Program of General Education

The education of the child is designed to enable him to make the most of his natural physical and mental endowments throughout life so that he may have the maximum capacity to enjoy life and to serve usefully his family, society, and himself.

Since his use of other attainments is conditioned by the state of his health, those factors which tend to secure each child's own optimum degree of health are fundamental components of his preparation for life. These factors embrace school health services, instruction and training in the methods of healthful living. These factors are complementary to each other and inseparable from the child's general education, into which they should be integrated.

The prime objective of all school health activities will have been attained when each child who leaves school is as nearly as possible a perfect individual in the complete biological sense. Such perfection includes the anatomical and physiological development of the body and the mind in relation to the environment. This perfection cannot be profitably contemplated as being limited to the school years solely. What happened before the child began his schooling and what is to happen after he has finished it are constant considerations. Indeed no consideration in the life of the child may be excluded as irrelevant or even unimportant.

The component objectives of all school health services and school health education are:

To inspire the child with a desire to be well and happy;

To convey to the child a public and personal health ideal, designed to ensure for him the continuation throughout life of wholesome and effective living, physical and mental;

To educate the child, according to a definite plan, in the cultivation of those habits of living which will promote his present and his future health;

To impart health knowledge and attitudes to the child so that he will make intelligent health decisions;

To develop in the child a scientific attitude toward health matters, and an understanding of the scientific approach to health problems;

To maintain adequate sanitation in the school, the home and the community;

To protect the child against communicable and preventable diseases and avoidable physical defects by providing effective public health control measures, both individual and social, throughout the school and the community;

To bring each child up to his own optimal level of health;

To extend the school health program into the home by obtaining family and community support for the program;

To discover early any physical defects the child may have, secure their correction to the extent that they are remediable, and assist the child to adapt himself to any residual handicap;

To provide healthful school living for the child;

To relate the school health program to the health program in the community so that it may deal with real, current and practical problems;

To organize effectively not only the program of direct health instruction but the equally important indirect learning experiences of the child in the field of health.

II. The Key Position of the Classroom Teacher in Health Education

Clearly the key person in the school health program is the classroom teacher. It is the teacher who will implement any principles of health education which the local school and public health administrators may develop. It is she who sets the classroom pattern and carries the burden of the instruction. Upon her rests largely the final responsibility for the success or failure of any proposal for school health education. Unless she understands and accepts her responsibility in the program, the efforts of administrators and supervisors will go for naught.

The leaders of the teaching profession are deeply conscious of the need for more adequate school health programs. They have long held health a cardinal principle of education, and they recognize that the school should be the most important single organized social agency for the accomplishment of the health educational purposes here envisioned. Admittedly many teachers are already overburdened with a multiplicity of tasks. Seldom is subject matter subtracted from the school offerings; school programs are built rather by addition to the already crowded requirements. Under these circumstances it may be necessary to see that such teachers' loads are lightened, if the teachers are to participate effectively in a school health program. In most cases, however, teachers can and will find time to work on the health program if they are convinced of its worth. They need, of course, to be health conscious themselves and to be just as much concerned with the physical development of the children as with their mental achievement. They need particularly to realize that health cannot profitably be taught simply as a skill subject: it is rather a mode of life.

The elementary and secondary school teacher should:

Understand growth and development of children (physical, mental, emotional and social);

Understand the materials and methods of health education, both as to direct instruction and as to indirect learning experiences;

Have a basic understanding of the philosophy and methods of teaching physical education, and know what physical education can contribute to the education of the child;

Be able to recognize as early as possible, and cope with, any deviation from the normal mental, physical, and emotional development in children;

Have basic training in first aid and safety;

Understand the health problems and resources of the community; Be an example of one who lives by recognized beneficial health habits.

III. Teacher-Supervision and Guidance in Health Education

The organization of an ideal program of health education in a school system requires a coordinating, directing head who will have the responsibility of supervision. In school systems in which there is no health educator, coordinator, or director who is responsible for the supervision of health teaching, the responsibility for supervision of this phase of the program falls to the supervisory authority. In addition, the teacher has a right to expect help from the school physician and nurse in understanding the individual child.

Among the educational principles that need to be kept constantly in mind in the teaching of health, the following* may be cited as fundamental:

In health education, as in character education, special consideration needs to be given to the child's indirect learning experiences that take place not only in the school but also in the home and in the community. (In the school these will involve such things as the actual school health services, the sanitation of the school, the lunch period, the organization of the day and the entire program of healthful school living.)

The child should think of health as a matter of conduct, not as a subject of instruction, for health knowledge is only a guide for healthful living.

In the field of health, as in other areas, repetition, accompanied by satisfaction, is necessary for the most effective formation of habits and for the maintenance of these habits at each grade level.

Emphasis is placed upon what to do, not upon what not to do. (The teaching is positive, not negative.)

Children are commended for success.

Particular care is taken not to hold the child responsible for the improvement of conditions over which, for some such reason as lack of family cooperation, he has no control.

The teacher helps the child to see that the ultimate reward of health practices will be found in growth, in improved physical accomplishment, and in other concrete evidences of health rather than in school records as such.

^{*}Adapted from Principles of Health Education, C. E. Turner, pp. 70-77, Second edition, 1939, D. C. Heath and Company.

For young children, interest in growth is the best single incentive toward the improvement of health behavior.

The tendency of children to imitate those whom they admire is so strong that it may be used as a force in developing health behavior.

The distribution of emphasis will vary to meet the actual needs of different classes, as reflected by the observable health practices of the students and by the medical and dental reports of their physical conditions.

The result of the child's experiences in developing health habits should be pleasurable, no matter what his present physical shortcomings may be. Unhappy mental states are to be avoided.

IV. Relationship of Health Instruction to Other School Experiences

An organized and adequate program of direct health instruction and of indirect learning experiences should be planned to reach all students at all levels of education in the entire primary and secondary school program.

In addition, the teacher and the school should attempt to correlate health teaching with the other courses in the curriculum that have a real bearing on health. For example, health and physical education are closely related. Physical education provides an incentive for health; it is an important aid in attaining health; and it is in some degree a measure of the quality of health.

On the basis of actually pertinent subject matter, correlation in a wide variety of other courses will support the specialized health instruction and help the child to apply health facts to life situations. Valuable opportunities for such correlations will be found, for instance, in the teaching of general science, biology, chemistry, social science, and home economics.

Another valid type of correlation, designed to lend interest to the learning of fundamental skills, may be achieved by using health facts, experiences, or situations in courses such as reading, language, arithmetic and handwork.

It is important that each teacher who touches health at all should know what health subject matter is being taught in other classes or grades; and that all the school employees should work together to see that the child's indirect health learning, so far as it is within the influence of the school, is in accord with his direct instruction in the hygiene course and in the related courses.

V. Relationship of School Health Education to Community Health Education

The achievement for each child of his own optimum health depends, as has been brought out, upon his whole way of life, and not only upon his experiences during that portion of the day that he spends, during about 180 days of the year, under school supervision. If there is to be a carry-over, into the home and into the community, of the health knowledge and health practices acquired at school, it would seem that there must be some sort of correlation between school health education, parent education and general community-wide health education.

Where townships, municipalities, or counties maintain fulltime official local health departments, the fulltime medical health officer, who has special training in public health, plans his department's program of community health education on the basis of scientific data as to the most pressing health needs of the area.

But many communities in Illinois, especially rural communities, are without this kind of well-rounded fulltime official local health service. In such areas the school that wishes to conduct a functional health education program will need to determine for itself, on the basis of statistical information and guidance that State and Federal health agencies may make available, the most significant child health problems and community health problems of the locality. Although the school will obviously not be able to accomplish alone the solution of all these problems, the school may quite properly, as the community's ranking educational institution, take the lead in making the needs known.

The school will do well to plan its own graded health education projects, and study units, both in specialized courses and through correlation, around recognized local needs. The methods and content of instruction should be based on the natural interests of the children and the cultural pattern and needs of the community. Such a functional school health education program, using the problem-solving technic, will make further gains by being kept flexible enough to dovetail with community health education projects, whether the latter are initiated by the school or by voluntary or official community health agencies. Where necessary, such projects may very well be initiated by the school, for it is evident that adult health education is an important parallel to the health education of the child.

Different features of the broad program may make greater or less appeal to a given community at a given time. It would seem best to aim at those features of the program for which public sentiment is prepared, meanwhile cultivating the soil for the next feature to be planted. A community in which several adolescent children have died unnecessarily of tuberculosis may be ripe for the tuberculosis prevention feature of its school and community health program, and yet may need considerable further education before being ready to appropriate money for other needed health activities in the schools. Responsible citizens, whether teachers or parents, can guide the evolution of their school and community health program more effectively if they know the whole outline of the complete program.

It is indeed fortunate that there are paths of community cooperation open to the school that wishes to use them. Among the various kinds of non-governmental agencies with which the school may effectively develop cooperative working relationships in regard to the community health education program are the Parent-Teacher Association, the local Medical Society, the local Dental Society, the local chapter of the American Red Cross, the Tuberculosis Association, the Ministerial Association, the Farm and Home Bureaus, the Chamber of Commerce, the newspaper, the radio station and service clubs. If the community is in need of more adequate official public health service than it has, the interest and cooperation of these groups would unquestionably help to bring about the establishment of the required fulltime local health department. To be expected as an important by-product of co-

operation with various civic groups and institutions, of course, is the development of better community understanding of the school program. The school and community should work together.

VI. Implementation of the Program Through the Health Committee or Council

As has already been pointed out in the section on Suggested Organization for Program Planning at the beginning of this report, one of the best ways for implementing an adequate school health program is the effective functioning of both school and community health committees or councils. Organized according to democratic principles with complete representation from all groups concerned, such councils may prove invaluable in stimulating, molding and sustaining health programs which adequately meet the specific needs of the individual local area.

VII. School and Health Department Relationships

There are a number of methods by which successful joint programs have been developed locally between school administrators and public health administrators. Whatever method is used, the key to its successful operation lies in the careful definition of the functions and lines of authority of each agency, and of the specific functions of the various types of personnel in each agency. A school superintendent and a health officer may have perfect agreement between themselves as to the respective functions in the school health program of their two organizations, but they must not overlook the fact that their staff members must also know just what they are to do, and have their individual functions outlined. It is the job of the school superintendent and the local health officer to coordinate the respective functions of their staff members with respect to the school health program.

It should be clearly understood that each agency retains administrative control of its own activities. Everything which goes on in the schools must be in accordance with school administrative policies. There should be no reasonable excuse for either the health department or any private agency to enter a school with a program which runs counter to the educational policies of the school administration. For example, if a nurse or other health specialist teaches classes in the school, she should possess the same teaching qualifications and be subject to the same kind of supervision as the other teachers. When doctors, dentists and nurses are supplied by the health department, it is expected that the health department decides on their qualifications, and supervises the technical aspects of their work. The school system decides on the professional qualifications and teaching methods of all who teach. When serving a school each individual should adhere to the school regulations exactly as if he were employed by the school.

Difficulties sometimes arise in separating the educational functions of physicians and the health functions of teachers. The physician provides health guidance for the individual child. This should be an educational experience for the child. The teacher is primarily concerned with health problems which do not need medical or dental attention. She deals with accepted standards of individual conduct or principles of health behavior. Most of her instruction

involves groups of children and for this type of program she is especially trained. In matters regarding medical or dental supervision, a specialist should function, but in matters of health teaching, that other trained specialist, the teacher, should function. Let cooperation bridge the gaps of preparation. Good administration will allow the educational specialist and health specialist to work together, each respecting the professional status, skill and activities of the other.

There is no single best plan for the coordination of agencies in the health program in the school. Local factors and available personnel influence all plans. What will work in one city or one system may not work in another. Successful coordinated programs are sometimes based upon informal personal relationships between the administrative heads of the cooperating agencies. They are sometimes based upon rather informal committee organization, including the agencies and professions concerned, and sometimes upon the organization of a more formal school health council. It is suggested that where a school health council is organized, the schools should be represented by administrators, supervisors and teachers, and the health department by the health officer, community health educators and public health nurses. Other participating agencies should, of course, be represented also.

As the cooperative activities succeed, and increase in scope, the program may reach the point of requiring some one person to devote full time to drawing the activities together and seeing that the entire undertaking moves cohesively toward the general goal. Sometimes this is done by an individual representing one of the participating agencies, with the endorsement of all the other groups.

Some Illinois health officers have on their local health department staffs, as health education specialists, persons who have had training in education as well as in public health, and who would accordingly be particularly well qualified to assist in the development of a coordinated school and community program of health education. If the local health department has no such staff member, it may prove feasible for the local school authorities and health authorities to employ such a person jointly, as coordinator.

Specific Objectives

I. Examinations and Observations for Determining Health Status—II. Specific Disease Control—III. Physiology—IV. Dental Health—V. Care of the Eyes, Ears, Nose, Nails, Skin and Hair—VI. Clothing—VII. Harmful Substances—VIII. The Importance and Care of Food—IX. Rest, Relaxation and Sleep—X. Physical Education, Exercise and Body Mechanics—XI. Sanitation—XII. Safety—XIII. Character, Personality and Social Adjustment—XIV. School Environment—XV. Community Health Services.

In presenting the following list of specific objectives of a school health program it is clearly recognized that the list may well be impractically long and repetitious; that some of the items are almost too trivial to mention; that other items are so sweeping in scope that their realization may be impossible; that certain items may not be advisably considered in the case of certain individual children and that grade placement of the material is best performed by the local school system.

In an adequate school health program which extends into the home, it is

suggested that each child should realize the following objectives:

I.

- 1. Experience routine health examinations made with explanation of the need for examination and interpretation of the findings.
- 2. Be examined specifically for rheumatic involvement and cardiac disability from time to time between routine health examinations—especially in connection with the athletic program.
- Receive vision tests, hearing tests, speech tests and dental check-ups as often as necessary.
- 4. Receive routine haemoglobin estimations, erythrocyte counts and urine examinations.
- 5. Be examined specifically for psychological disorders.
- 6. Be observed for the development of the common posture defects, it being assumed that major orthopedic defects have been corrected insofar as possible.
- 7. Be measured for growth (weight, height and body build) as often as may be desirable between routine health examinations (children should be weighed monthly in elementary schools).
- 8. Be tuberculin tested at suitable intervals and x-rayed if necessary.
- 9. Be followed up to insure treatment of any pathological condition found.

II.

10. Be instructed not only in general health terms but also in the specific characteristics of certain diseases, particularly tuberculosis, syphilis, other infections, infestations, nutritional deficiencies, endocrine disorders, heart disease, cancer and renal disease.

- 11. Be immunized against diphtheria and smallpox.
- 12. Be immunized against certain other specific diseases in accordance with individual or community needs such as pertussis, tetanus and typhoid fever.
- 13. Be protected by group control methods against certain other diseases such as cancer, malaria, hookworm, pinworms, tapeworm, ascariasis, amoebiasis, fungus infection, scabies, pediculosis, trichinosis, respiratory infections, brucellosis, shigellosis, salmonellosis and meningococcus infection.

III.

14. Learn the basic facts concerning the functioning of the body as a whole and of its parts.

IV.

- 15. Brush his teeth and gums in an approved manner at least twice a day using his own toothbrush of proper size, shape and stiffness.
- 16. Refrain from biting or breaking hard substances with the teeth, from putting inappropriate articles such as pencils in the mouth, and from interchanging candy, gum, fruit, or any other edibles.
- 17. Cooperate with parents and school in going to the dentist twice a year.
- 18. Chew all food thoroughly and eat daily some food which requires vigorous chewing.
- 19. Refrain from thumb or finger sucking.
- 20. Refrain from resting cheek on hand.
- 21. Refrain from biting thumb, lip and cheek.
- 22. Restrict the sugar intake.

V.

- 23. Read or work only in a light of sufficient intensity, without shadows or glare.
- 24. Avoid reading on moving vehicles or while lying down.
- 25. Hold his book or work in the correct position and at the correct distance from the eyes (approximately 16 inches).
- 26. Select books with large print and unglazed paper whenever possible.
- 27. Rest the eyes occasionally by closing them or looking at distant objects.
- 28. Refrain from looking at the sun or bright lights.
- 29. Wear colored glasses or visors for protection when needed (especially at sea, on the snow, in the sun).
- 30. Avoid rubbing the eyes or using them needlessly when tired or strained.
- 31. Go to motion pictures only in moderation.
- 32. Wash the ears carefully.
- 33. Refrain from putting anything into the ears.
- 34. Refrain from striking a person's ear or shouting into it.
- 35. Protect the ears when diving or swimming.

- 36. Carry a clean handkerchief (or tissues) every day.
- 37. Use his own handkerchief and blow his nose gently without closing the nostrils.
- 38. Keep the fingers away from the nose and refrain from putting anything into the nose.
- 39. Breathe through the nose with the mouth closed.
- 40. Cover the mouth with handkerchief when sneezing or coughing.
- 41. Use a well modulated speaking voice and avoid straining the voice in yelling.
- 42. Wash the hands thoroughly with warm water and soap before eating or handling food, after toilet and whenever play or occupation indicates.
- 43. Take an all-over cleansing bath with warm water and soap at least twice a week and bathe daily those parts of the body that perspire freely and are involved in the discharge of body wastes.
- 44. Use his own clean towel and washcloth.
- 45. Use a mild soap and rinse and dry the skin thoroughly to prevent chapping.
- 46. Keep the fingernails trimmed and clean.
- 47. Push back the cuticle and avoid picking it to prevent hangnails.
- 48. Refrain from biting the nails.
- 49. Avoid continued irritation of any parts of the skin.
- 50. Keep the hands from the face and avoid squeezing or picking at pimples.
- 51. Brush and comb the hair daily.
- 52. Use one's own brush and comb, and keep them clean.
- 53. Wash or shampoo the hair frequently and dry the hair before going out of doors.

VI.

- 54. Depend more upon intelligent reasoning than upon bodily sensations in determining the amount and kind of clothing to wear so that it will be properly adapted to occupation, changes in weather, seasons and temperatures (both indoors and outdoors).
- 55. Wear proper night clothing.
- 56. Remove wraps and rubbers when indoors and avoid water-proofed materials for constant wear.
- 57. Remove damp clothing as soon as possible and wear extra wraps to prevent chilling after exercise.
- 58. Avoid tight clothing, including shoes and hats.
- 59. Put on clean underclothes and stockings at least twice a week, preferably after a bath.
- 60. Keep all clothing as clean as possible.
- 61. Assume responsibility for airing, brushing and polishing items of clothing.
- 62. Select healthful clothing when buying for himself.

VII.

- 63. Study the effects of alcohol and narcotics in accordance with the Illinois school law and avoid alcoholic beverages, narcotics and tobacco.
- 64. Avoid habit forming drugs, unless prescribed by a physician.
- 65. Avoid patent medicines, unless prescribed-by a physician.
- 66. Avoid tea and coffee during the growing period.

VIII.

- 67. Learn the signs of good nutrition.
- 68. Learn to like all foods necessary for health and growth, including milk and dairy products, vegetables, fruits, whole grain or enriched cereals and breads, meats, fish, poultry and eggs.
- 69. Learn to choose and eat an adequate breakfast, lunch and dinner daily.
- 70. Learn to take sufficient time (at least 30 minutes) to eat his meals.
- 71. Avoid eating between meals, or, if necessary, eat only suitable foods.
- 72. Avoid the use of sweets except at mealtime and then in moderate amounts.
- 73. Learn to eat meals at regular intervals and avoid the "no breakfast" habit.
- 74. Eat meals in a pleasant environment.
- 75. Learn to drink a sufficient amount of water daily.
- 76. Learn table etiquette.
- 77. Learn the relation of food to healthy growth, resistance to fatigue, attractive appearance, physical well being, maintenance and function of the body.
- 78. Learn the food needs of the body, what happens to food in the body, the basic food groups and what each of these groups contributes.
- 79. Learn how to plan for himself and his family a balanced breakfast, lunch and dinner in relation to cost, available foods, and racial food habits.
- 80. Learn how to prepare food to make it palatable and attractive and to conserve its nutritive value.
- 81. Learn how to buy food economically and to get the most value for the money expended.
- 82. Learn about food production and preservation.
- 83. Appreciate the value of food sanitation.
- 84. Appreciate dangers of food fads and fallacies.
- 85. Learn the effects of food deficiencies upon the body.
- 86. Learn about care of food in the home.
- 87. Drink only that milk which has been pasteurized and properly stored and kept covered and in a refrigerator or similar cool, sanitary place of storage.
- 88. Cook all pork thoroughly to avoid transmittal of trichinosis.
- 89. Keep perishable or cooked foods in a refrigerator or similar cool, sanitary place.

- 90. Refrain from exchanging food or handling another's food unnecessarily.
- 91. Wash or peel fruit and vegetables if they are to be eaten without being cooked.
- 92. Scald dishes and eating utensils after they have been washed and allow them to air-dry.
- 93. Store clean dishes and eating utensils in a fly-proof and dust-proof cupboard or container.

IX.

- 94. Understand the importance of sleep and rest in securing and maintaining optimum health and efficiency.
- 95. Plan the day to provide a balanced program of rest and work, including adequate time for recreation.
- 96. Avoid undue fatigue.
- 97. Practice relaxation at definite times during the day, such as before and after meals and before bedtime.
- 98. Go to bed early enough to secure sufficient sleep to be refreshed and ready for the day's activity.
- 99. Avoid habitual sacrifice of sleep for movies, social activities or radio programs.
- 100. Sleep alone if possible and in a well ventilated, dark, quiet room.
- 101. Adjust bed clothing in accordance with weather.

X.

- 102. Participate regularly when in good health in the physical education activities offered by the school, such as daily total body activities (out of doors if the weather permits) of sufficient intensity and the amount to promote the optimum development of organic and muscular vigor, and growth.
- 103. Acquire reasonable proficiency in the fundamental skills necessary for safe participation in aquatics; combatives; individual, dual and team sports; track and field; self-testing activities; and gymnastics, including tumbling apparatus and rhythms.
- 104. Practice good body mechanics at all times. (Correct body mechanics is important for maintaining the correct mechanical correlations of the various systems of the body with special reference to the skeletal, muscular and visceral systems and their neurological associations. The good teacher will expect good body posture in the student's daily activities, especially sitting, standing and walking. This is not to be interpreted as a stilted pose, but rather as essential use of the body in varied activities.)
- 105. Understand and appreciate the values and importance of exercise (play) in one's daily life. (Exercise is one means of conserving the optimum level of organic and muscular efficiency. The desire to become fit and maintain this fitness must be developed. The desire for maintaining physical fitness should be stimulated by the recognition that good nutrition, adequate sleep, good medical and dental care, and emotional

stability are factors of actual or probably greater importance. Exercise can be made to maintain and develop desirable traits of courage, loyalty, fair play and cooperation. It can be a means of using one's leisure time in a wholesome manner and of securing better social adjustment through team sports.)

106. Use exercise (play) as a means of self-expression for developing self-confidence, better social adjustment (physical, social and mental poise) by mastery of activities suitable to one's age and capacity. (Exercise is a socially accepted medium for the expression of one's urges, desires, drives and emotions as well as a medium for developing desirable traits of courage, loyalty, cooperation and fair play.)

XI.

- 107. Drink water that is obtained from a safe source of supply and distributed in a system or manner which does not permit contamination to enter the water.
- 108. Boil or chemically disinfect drinking water, the sanitary quality of which is at all doubtful.
- 109. Use his individual drinking cup or glass and refrain from dipping the drinking cup or glass into the drinking water container.
- 110. Dispose of body wastes in such a manner that flies, rodents and other animals cannot have access to them.
- 111. Place household waste and garbage in appropriate containers for later removal by a scavenger or for disposal by burning or burial.
- 112. Keep home, yard and premises clean and dispose of trash in a proper manner.
- 113. Keep window screens and screen doors in effective condition and closed to exclude flies, mosquitoes and other disease bearing insects.
- 114. Destroy insects and their breeding places.
- 115. Prevent accumulations of litter or trash which might encourage infestation of premises with rats or mice.
- 116. Eliminate rats and mice by use of traps or other methods not harmful to human beings, birds and domestic animals.
- 117. Regulate ventilation of rooms so that an adequate supply of fresh air is available.
- 118. Clean shoes on door mat before entering home, school or other building.
- 119. Dust furniture and floors with mop or cloth which picks up dust instead of dispersing it into the air.
- 120. Change bed linens with necessary frequence and after the departure of overnight guests.

XII.*

- 121. Learn the extent of injuries and fatalities which occur yearly.
- 122. Realize that a majority of accidents can be prevented.

^{*} A detailed list of safety precautions is available from the National Safety Council, 20 N. Wacker Drive, Chicago 6, Illinois, and other agencies.

- 123. Learn the cause of and avoid accidents in the home, such as falls, burns, fires, poisoning, electrical shocks and asphyxiation.
- 124. Learn the cause of and avoid automobile accidents, such as those occasioned by violating traffic regulations, stealing rides, getting on or off moving vehicles and careless pedestrian habits.
- 125. Learn the cause of and avoid accidents while playing, such as those occasioned by the improper handling of fireworks and firearms or taking unnecessary risks while swimming, boating, coasting, or skating.
- 126. Learn and practice the rules of safe conduct in the use of school buildings, gymnasiums, playgrounds and athletic fields.
- 127. Learn and develop habits of safe conduct in occupational areas in which pupils frequently participate in addition to attending school.
- 128. Learn safe ways of meeting the common hazards associated with the occupations in which a majority of the pupils are likely to be associated with in adult life.
- 129. Develop habits and attitudes which will enable the individual to meet situations of daily life with the least possible risk, exposure and danger.
- 130. Develop coordination, alertness, strength and agility as a means of avoiding accidents.
- 131. Learn the value of cooperation for the protection of all.
- 132. Learn and realize the futility of taking unnecessary risks involving added chances for accidents.
- 133. Develop wholesome attitudes in regard to risk, safe practices, and safety rules and regulations.
- 134. Develop a respectful and wholesome attitude toward persons charged with the duty of providing and maintaining safe working and living conditions.
- 135. Gain experience in numerous safety practices.
- 136. Create, develop and maintain an active interest in the protection of life and property in the community.
- 137. Develop a sense of responsibility for the safety of others in all situations.
- 138. Learn the theory and practice of first aid.
- 139. Learn to apply the scientific knowledge gained in school subjects for the safety welfare of the individual and the group.
- 140. Assist in developing safe conditions for work and play as an important part of community life.

XIII.

- 141. Exercise curiosity concerning the world about him.
- 142. Concentrate on whatever he is doing and complete his task successfully, reasonably often.
- 143. Develop increasing initiative in work and play.
- 144. Develop increasing independence and ability to solve his own problems.
- 145. Meet difficulties and disappointments squarely.
- 146. Cultivate a habit of cheerful calm and poise, controlling himself in anger, fear or other strong emotions.

- 147. Develop a sense of responsibility for the happiness and well-being of others.
- 148. Have wholesome relationships with children of the opposite sex.
- 149. Possess feelings of being wanted, of being needed and of belonging.
- 150. Learn to adjust to hereditary characteristics over which he has no control.
- 151. Learn to recognize and adjust to differences in functional health.
- 152. Recognize and accept limitations in energy, endurance and native intelligence and develop a constructive attitude toward such limitations.
- 153. Capitalize on special abilities and capacities.
- 154. Develop social relationships as a means to a happy adjustment in the daily routine of school and home life.
- 155. Gain experience in adjusting to different types of personalities.
- 156. Learn to give expression to his particular type of personality.
- 157. Develop uses for leisure time along socially approved lines.
- 158. Develop some form of creative self-expression.
- 159. Learn good sportsmanship in all phases of school and home life as well as in physical and recreational activities.
- 160. Learn the value of teamwork and cooperation.
- 161. Learn to assume responsibility.
- 162. Learn to control conflicts in thoughts and action.
- 163. Learn how to assist in controlling home life to attain a happy situation.

XIV.

- 164. Experience a school environment in which:
 - a. Teachers are secure and free from fears, worries, anxieties, apprehensions and depressions.
 - b. There are teachers of both sexes.
 - c. A considerable number of teachers are happily married.
 - d. The teachers are physically healthy.
 - e. The teachers know and understand the significance of the health status of the child.
 - f. The teachers understand that most emotional maladjustments have their bases in the experiences of childhood.
 - g. The teachers understand that most of the difficulties encountered in the teaching of a given child are evidences of emotional disturbances which may be corrected by proper investigation and treatment.
 - h. The physical, emotional and social development of the child at different age levels is understood.
 - i. Adequate consideration is given to the problems of youth including sex hygiene.
 - Parents are assisted in understanding the child's personality development.
 - k. Early deviation from normal behavior is recognized and the underlying cause is sought.

- 1. Help with problems of personal adjustment may be obtained.
- m. Vocational guidance is available.
- n. Guidance is furnished in the selection of courses which will be both challenging and within the individual's mental activity.
- o. Psychiatric help is accessible, preferably within the school itself.
- p. The teachers like children and are teaching because they wish to do so.

XV.

- 165. Appreciate the fact that community health services should include to the greatest extent practicable:
 - a. The provision of a safe and ample water supply.
 - b. The sanitary control of milk, meat and other foods.
 - c. An adequate sewage and refuse disposal system.
 - d. The supervision of housing sanitation.
 - e. Measures for the control of all communicable diseases.
 - f. Adequate hospital facilities for the care of the sick.
 - g. Diagnostic laboratory facilities.
 - h. Extensive public health nursing services.
 - i. A program of child hygiene; including prenatal, infant and preschool services.
 - j. A program of school hygiene; including physical, dental and mental examinations, medical inspections and corrections of defects.
 - k. A program of industrial hygiene.
 - 1. The sanitary supervision of recreational facilities.
 - m. A program of health education in all its phases and among all age groups.
 - n. A comprehensive system of vital statistical records.
 - o. Activities which help to establish a healthy mental situation.
 - p. The establishment of competent official health organizations and the enactment of laws and regulations necessary for the enforcement of all community health measures.
- 166. Appreciate the personal utilization of all the community health services enumerated above.
- 167. Learn to exercise a personal interest and effort in the establishment and maintenance of such community health services.

The Organization of the Student Day in the Interest of Mental and Physical Health

The Administrator's Responsibility—The Teacher's Responsibility—The Parent's Responsibility—The Student's Responsibility—The Community's Responsibility.

I. General Introduction

In order to achieve a functional program of healthful living, it is essential to consider very carefully the organization of the student day. Little is gained from the acquisition of health knowledge and the provision for health examinations and services unless the child has an opportunity to live healthfully. Intelligent living requires the cooperation of the school, home, community and the student himself. The mental and emotional stability of teachers and students which is necessary for proper pupil-teacher adjustment is directly influenced by the attitudes of the school board, the administrator, and the community. Basic elements in such a plan are:

- 1. A guidance system to aid individual pupils.
- 2. Provision for a balanced program of work, physical activity, relaxation, rest, and recreation.
- 3. Home and school contact adequate for understanding and adjusting individual health problems.

II. The Administrator's Responsibility

Specific Recommendations

1. Class periods should vary in length depending upon the age of the pupils, the character of the class activity and the emotional stability of the teacher and the class. For a six-year-old engaged in close intensive work a ten to fifteen-minute period should be the maximum. If the work is less concentrated a longer period is possible without injury. An increase of a few minutes in each grade thereafter may be made for average children. Where some freedom to move about is allowed, there is less likelihood that children will suffer from strain.

From the standpoint of physical and mental health, the modern curriculum which recognizes children's normal interests and activities is a tremendous improvement over the restrictive program of earlier days. When the school day consists of many short and unrelated class periods, the frequent adjustments required of the pupil are a source of strain. The school in which pupils at many grade levels study from eight to ten different subjects daily is an example of this situation. Fewer and longer class periods would provide a more healthful day.

2. Factors that seem more significant than size of the class are the range of ability in the class, the type of work being done, the ability and experience of the teacher and her skill in adapting the work to the individual pupil. Ideally, the primary teacher should not have more than twenty-five pupils. The less capable pupil in a large class will be submerged, with all the ensuing

personality difficulties, unless the teacher adjusts his requirements. The more capable student needs to have demands made upon his best efforts. Teachers cannot hope to have all pupils achieve in equal amounts and with equal success if their physical and mental well-being are to be considered. There must be individual guidance and the class should be small enough to permit it. On the other hand, the class should not be so small that group activity and experience are impossible, a situation that is found in the very small rural school.

- 3. There is little significance to be attached to the sequence in which classes are arranged in the daily program. The notion that arithmetic, for example, is the most difficult subject and should therefore come the first hour of the day when pupils are supposedly most efficient is not supported by scientific study. No one subject can be said to be most difficult. Subjects vary in difficulty among pupils and not all pupils do their best work early in the school day. A good principle to follow is that the arrangement of school work should provide variety of activity to relieve physical tension and mental boredom. It is generally agreed that a rich and varied day's program will not cause undue strain or physical fatigue.
- 4. The length of the school day must be adjusted to the age level of children. The arrangement of the daily program of the child is the joint responsibility of the parents, the school, and the community. In general, the length of the school day should range from a minimum of 240 minutes for Grade I to a maximum of 360 minutes for high schools, including recreatory periods. Recreatory periods should be such as to provide healthful activities for the child. The practical difficulty of dismissing children in the lower grades earlier must be recognized and met. Unless younger children can safely go home unattended by older pupils or parents, supervision must be provided during the interval until all are dismissed.

Children need supervision on the playground at all times. If no better plan can be devised, the younger children should be dismissed from formal school work and provided with materials of the creative and constructive play types. A corner in the school room which can be given semi-privacy is an acceptable play space where younger children may use such materials in relaxing and satisfying activity. Parents of younger children should understand why a shorter day is needed at that age level. At any age level, the school day should be made as short as is consistent with adequate instruction.

For high school students, a school day of six hours should be ample for basic classwork including minimum preparations, essential library reading, and laboratory periods. To require a longer day is to endanger the physical well-being of the student regardless of his ability and ambition.

Some home study may be desirable, especially in the last two years of high school, to enable the student to develop self-direction and responsibility for independent work. Until other social agencies are ready to offer opportunities needed for youth in their all-around development, the school may well continue to dominate the student's time.

5. One hundred percent attendance at school has been unduly emphasized. Remuneration on the basis of average daily attendance is responsible in part for this. When a child is ill, he should be kept at home, or be sent home if illness occurs at school. Common colds and infections can be partially controlled, at least, if parents and teachers cooperate in excluding ill children from school. Less school time is lost when pupils stay at home and in bed with their colds than when they bring their colds to school. If children were not penalized with make-up work immediately after bona-fide illness fewer of them would attend school when really sick.

Feigned illness, on the other hand, may be a pupil's means of escaping an unpleasant situation at school. The distinction which must be drawn between safeguarding the health of children and coddling them is difficult in many instances. Too much stress cannot be laid on the value of good working relationships among pupils, teachers, and parents in meeting problems of attendance. The school nurse can render invaluable assistance in these matters. It is agreed that extra assistance must be given to teachers when there are extra make-up loads. This responsibility lies with the administrator.

The teacher likewise should remain at home when she is ill. School administrators should work out a plan whereby a substitute may be provided to relieve the ill teacher for a reasonable period of time without loss of salary.

- 6. Provision should be made in the school day for *social and emotional growth*. Time should be allotted during the day for social contacts between secondary school boys and girls.
- 7. Time should be provided in the school day for parent-teacher and student-teacher *conferences* and such conferences should be included in the reckoning of the teacher load.
- 8. Information about a student who has been through an *unusual or un-foreseen experience* should be disseminated to all of his teachers and his schedule should be adjusted temporarily to meet the situation.
- 9. Periods of relaxation should be planned for the group as well as for the individual. Provision should be made in the school day for a release from tension through participation in physical activity. Students should be taught how to relieve tension through muscular relaxation as well as through the medium of physical activity.
- 10. Adequate time should be allotted between classes for students to go from one class to another.
- 11. Marks and speed tests increase the pressure upon a student. They should be used as an educational technique to assist the student and condition him to meet such pressures.
- 12. There should be some regulation of the *extra-curricular activities* of students in order to decrease the over-stimulation of some students and the lack of participation of others.
- 13. Special adaptation of the school program should be made for under par and for handicapped children.
- 14. Time should be allowed for proper *toilet habits* in the secondary as well as elementary schools. This should include adequate time for handwashing after the toilet and before meals. Paper towels, hot water, and liquid soap should be provided.
- 15. Children should be weighed and measured at regular intervals. Elementary school children should be weighed once a month and the height taken twice during the year.

The child's rate of growth will vary according to his heredity and seasonal variations. Regular weighing gives the child, his parents, and his teacher an opportunity to watch his growth, thus acting as an incentive for the child to develop certain health habits. Such a program of weighing and measuring is an inexpensive means of screening out children who show no gain in weight for three or more months for referral to the physician. Cumulative growth increment charts (showing the amount of increase in the growth of the student) should be kept for every student to show the progress in the development of the child. Student behavior patterns follow the physical growth of the child.

A platform scale of the balance type is preferable since spring scales are not as accurate. The scale should be one which will stand moving without getting out of order and it should always be checked before using to make sure it is in balance. The graduations should be at least as fine as quarter pounds.

Children should stand in the center of the scale and be weighed without shoes, coats, or sweaters. The weighing should be done at the same hour of the day since the weight varies considerably over the period of a day.

- 16. Height measurements should be taken with shoes off, with heels together and against an accurate scale or measuring tape attached to a flat surface. Measurements taken by the metal rod on a scale are not accurate. A leveling device (a chalk box will do) should be held at a right angle to the flat measuring surface to secure the right height and the data should be recorded to the nearest quarter inch.
- 17. No child's weight should be compared to an average weight as such weight does not take into consideration that each child is a pattern unto himself.
- 18. Time should be allotted for adequate *luncheon* hours and sufficient supervision and guidance should be supplied. Students should be encouraged to eat more fruits, vegetables, eggs, milk, and dairy products. The practice of selecting "hot dogs", chili, hamburgers, candy and commercial drinks should be discouraged.

The purpose of the school lunch program is to improve the general health of school children and youth by providing simple nutritious foods at low cost with an opportunity for pupils to learn to eat foods that build health and by educating children to select balanced meals. Local school officials should recognize the school lunch program as an educational activity of the school and should assume administrative responsibility for organizing, operating, and maintaining the program. It may be administered by a trained director in cooperation with the health and home economics departments in the school (in average size schools); or by the teacher or other trained person (in one room schools).

The school lunch should be a total school program with all departments and teachers cooperating, equalizing responsibilities in order that no one department or group of pupils be exploited. It is essential to give students training in fundamental nutrition principles in order to have them understand the school lunch program. Home economics students in the secondary schools can be utilized as leaders in a school nutrition drive. An educational rather than an institutional management philosophy should permeate the

school nutrition and luncheon program. It is a laboratory where all pupils may gain a variety of practical learning experiences related to agriculture, art, home economics, industrial arts, mathematics, science and other subjects.

The lunch hour should be a regular period in the school day. In large systems, there should be several lunch hours such as (1) 11:15 a. m. to 12:00 noon; (2) 12:00 to 12:45 p. m.; (3) 12:45 p. m. to 1:30 p. m. Thus students are allowed to eat leisurely during an unassigned period. This also relieves congestion.

The period of eating should be supervised and students should be seated at tables of six or eight with one acting as hostess. No student should leave the table until the hostess has finished and dismisses the group. Soft victrola music, carefully selected, has been known to help students to eat more slowly.

The school lunch should be operated on a sound financial basis. Schools should depend, as far as possible, upon the resources of their local community for the food necessary for the school lunch. Those selected to be responsible for preparation of food for school lunch should: (1) know and apply simple facts of nutrition in meal planning, (2) practice desirable standards of cleanliness of person, of storage, preparation and serving of food, (3) be able to prepare foods without loss of food values and serve them so they will appeal to the eye, (4) meet regulations of State and local health authorities governing the health of persons who handle food, (5) have a cooperative attitude toward all who assist with the program.

Parents and other citizens can make valuable contributions through: (1) interpreting to the community the need and value of the school lunch, (2) sharing surplus food, (3) cooperating in garden and canning projects, (4) raising money to buy equipment, (5) recommending suitable help, (6) encouraging pupils to patronize the school lunch, (7) donating services whenever needed.

The school lunch should be as distinct a department of its own as the Commercial or the Biology Departments and should be housed in rooms set aside for this purpose. (In small one room schools, a part of the room can be allocated to the preparation of lunch.) The location should provide adequate light, ventilation and sanitation. It should be easily accessible to pupils and for the delivery of food and the disposal of garbage.

Windows and doors should be screened. Floors and working surfaces should be sanitary and easily cleaned. Adequate hot water and facilities for the sanitary care of dishes and equipment should be provided. Food should also be well protected from vermin and adequate refrigeration provided for

perishable foods.

19. The starting point of an adequate program of *physical education* in the elementary and secondary school should be a comprehensive health examination. The school, home, and community should develop a functional health guidance program which will be concerned with the establishment of desirable habits and attitudes of rest, relaxation, sleep, diet, work, study, and recreation. Furthermore, since most adults show the same defects which they had as children, a vigorous follow-up program for the correction of all remediable defects should come after the health examination.

Health is not the responsibility of one teacher, nor of one department alone. As one of the principles of education it should be given serious con-

sideration by all teachers. The program of physical education should be based on the individual needs of the pupils, and the recreational means and facilities of the community in so far as this is possible. This should be determined by studying the cumulative data of the health examination, and other data secured through the school and community activities of each one concerned.

This assumes that those students who need special activity, modified activity, additional rest, or more activity, will receive it during school time, on every grade level. It is further recommended that greater use be made of music, both vocal and instrumental on all levels, in developing the various parts of the program. The emphasis should be on a graded curriculum which is broad and varied, and which meets the criteria established by the Office of the Superintendent of Public Instruction. Every attempt should be made to offer a wide range of activities over a period of years, so that every pupil will meet many challenges.

Because of the many emotional, physical, and mental strains which the pupil continuously encounters, his activity needs must be carefully studied. Many students are already over-stimulated and need a better planned program of activity. Some are gainfully employed in a variety of areas after school hours and during week ends. This may result in additional strains on the pupil's vitality and health, particularly if he attempts to continue with the usual units of academic subjects. All students physically capable of attending school for the school day should be able and required to participate in some type of physical activity adjusted to their capacity except in cases of recent illness or injury where extra rest is beneficial and recommended by a physician. In all cases, the physical education period of the student unable to participate in vigorous physical activity should be used as a health teaching period and the student should have modified activity or rest. To place the student unable to participate temporarily in activity in a study hall does not satisfy the need of the student.

Students who are gainfully employed for a part of the day should not be excused from their physical education activity but should have their physical education program adjusted to their needs. Students who are working need an opportunity for social inter-action in a play medium and the release from tension that is gained from participation in physical activity. Adequate time should be allotted for dressing and undressing for physical education classes.

In general, the elementary school child should have from four to six hours of total body activity daily. This would, of course, include out-of-school play throughout the week as well as the program organized by the school.

Such a program should be based on the daily period, and may be best met by a combined instructional participation period which is related to the various age levels of the pupils in the school. For example, a thirty-minute instructional physical education period may be scheduled for each pupil daily and the usual (minimum 15 minute) short recesses, twice a day, used as opportunities for play, with emphasis on the activities learned earlier.

Much of learning should carry over into out-of-school play if activities suited to the needs, interests and capacities of the group are used. This will further be motivated if the program includes activities which the pupil enjoys doing, and in which he can experience some thrill of success quickly. The

teacher's task is to make participation in such total body activity an enjoyable and funful learning experience.

A daily activity period of at least an hour should be the minimum requirement for the high school pupil, with considerable leeway in choice of activities during the junior and senior years. The daily period of activity should grow into a comprehensive program of intramural and recreational opportunities. Every attempt should be made to raise the level of skill on the part of each individual pupil in a number of worthwhile activities, so there will be some assurance that participation will be continued. The school can play a most important role, not only by careful selection of activities and good teaching, but also by providing many organized intramural and recreational opportunities. School activities should serve as a basis for stimulating interest and participation in community activities. The school recreational facilities should be open for community uses over the week ends and during the evening hours with proper supervision supplied by either the school or the community.

The interscholastic program for the Boys' and the Girls' Athletic Association and intramural activities should be enlarged by the addition of other worthwhile sports, and by the development of more teams in a sport so that the number of participants will be increased substantially in every school. This is the peak of the physical education program which, in turn, is supplemented by the intramural "laboratory" periods of participation. The school should supplement the recreational activities it offers by utilizing to its utmost, the facilities within the community. Community and school activities should be coordinated in order to offer students the widest use of all of the facilities in the community.

Co-recreational activities should be included in the regular as well as the intramural and extra-curricular program. Physical activities offer a medium for the growing adolescent to make a good heterosexual adjustment. It helps the tomboy girl and the shy boy to be placed in a game situation where their attention is diverted from themselves toward a common goal.

III. The Teacher's Responsibility

General Comments

- 1. It is essential that the teacher understand the growth and development of children and through sympathetic guidance and counsel assist each child to develop his individual capacities to the best of his ability and to become a well-integrated person. Teachers may be stimulated to understand each child as a developing personality by making a case study of one or two children with whom they have contact.
- 2. Wholesome student-teacher relationships demand understanding on the part of the teacher of the growing child and his needs as exemplified by his behavior. The adjustment must be made most often by the adult to the child and not by the child to the adult. However, children must be taught as they mature to adjust to others. Good discipline is the result of good teacher-pupil adjustment.

Specific Recommendations

1. Teacher qualifications

Teachers should have the following specific qualifications: (1) be a well-integrated person (The emotional stability of the teacher has a direct effect upon the student with whom he comes in contact.); (2) like children and have a sympathetic understanding of them; (3) have good basic knowledge of child growth and development; mental, emotional, social and physical; (4) be free from prejudice; (5) have outside interests and satisfactions; (6) feel responsibility for knowing home and community conditions affecting the child and how to deal with them.

2. Teacher's role

Teachers should recognize and know the potentialities of the individual child in relation to: (1) his personality adjustments; (2) his present mental level (with the aid of available tests and measurements); (3) his school experiences; (4) his home (parental attitudes, economic level and family composition); (5) his physical development, medical history, physical handicaps and their effect on his social and emotional growth; (6) his outside interests and activities.

Teachers should recognize signs of future maladjustments as well as already present problems. They should recognize causes responsible for the problem and appreciate their extent and the need for help. The range of problems which should concern the teacher go from the shy withdrawn child who creates no classroom disturbance to the child who upsets classroom routine.

Teachers should recognize their responsibility for the prevention of incipient problems and assume responsibility within their limits for aiding and correcting already existing problems which can be handled in the following ways: (1) adjustment within the classroom, (2) conference with parents, (3) requesting aid of suitable agencies. (Teachers should be furnished with a list of available agencies.)

3. Homework assignments

a. In assigning homework, the teacher should consider the out-of-school needs of children, such as: (1) participation in family activities such as marketing and doing chores; (2) quiet restful companionship with members of the family; (3) at least two hours per day in out-of-door play or recreatory occupations; (4) ten to twelve hours of rest, varying with the individual child; (5) lessons and practice in music, art and dancing; (6) club meetings and related activities as in 4-H Club and Scouts; (7) attending games; (8) carning spending money; (9) personal care, attention to clothing, matters of personal appearance.

b. Conditions under which homework is done should be conducive to good study habits and good health habits. Ineffective results of study and unwholesome health habits may result from such conditions as: (1) poor lighting, heating, and ventilation; (2) unsuitable study table and chair with consequent bad posture; (3) frequent interruptions by other members of the family, the radio, telephone or other similar disturbances; (4) lack of reference materials; (5) lack of an organized plan for study at home; (6) procrastination and late hours for study; (7) unsuitable location for study;

- (8) lack of guidance and supervision, except by "volunteers" among the family who cause confusion and difficulty. (Parents should not be requested to assist the child with his homework assignments when the child has developed a specific learning problem such as reading or arithmetic. If a child is more than a year retarded for his expected mental level and needs specialized work, the parent is not the person to give it. This impairs the parent-child relationship.)
- c. Individual conditions will determine the nature and extent of homework. Unless the conditions at home are known to be suitable, regular assignments for home study are undesirable. Necessary absence from school may make home study expedient for a brief period. If parents of elementary school pupils insist on homework, let it be reading or handwork related to the school work and supplementary to it. In general, homework assignments:
 - (1) For primary and intermediate grades should not be prescribed.
- (2) For upper grades and junior high school levels should be supplementary related activities which are recreation to some degree. All basic work should be done at school under the supervision of the classroom teacher.
- (3) For high school students may well be supplementary well-chosen reading, or creative activities related to some school work. All possible basic work should be done during school hours and at school. The extraclass activity program at this level should not crowd basic preparation into homework assignments.
- (4) At no grade level should the attempt be made to force the slow-learning child to keep pace with his mentally more capable classmate. Such a course imperils both the physical and mental well-being of the student.
- (5) Whenever homework is a part of the child's program, the school administration has the responsibility for preventing too many and too heavy assignments at one time and for the development of a program of home study.
 - d. Make-up work assignments due to absence
- (1) The student who has returned to school after an absence due to illness should not have his daily schedule overloaded with make-up work. Ample time should be allowed for the make-up work and the teacher should recognize the student's impaired health condition.
- (2) When students should really remain at home, they should not be coerced to attend school due to make-up work being made more difficult than regular class assignments. Likewise, administrators should recognize the fact that when extra homework assignments are given, the teacher's tasks are increased and she should be given added assistance.

4. Examinations

a. The length of the examination period should vary with the age of the pupil and the character of the examination. When much weight is attached to a single test it becomes a source of emotional strain and physical disturbance, particularly among the very pupils who should be protected from such conditions. A momentous final, by which failure or success in passing to a higher grade level is determined, should be discouraged. Too much em-

phasis on memorization, which is involved in an over-emphasized final, is open to question, both from the pedagogical standpoint and that of health.

It is recommended that:

- (1) In primary grades, examinations be limited to ten minutes and be given frequently, as a class exercise.
- (2) In middle and upper grades, frequent objective tests using perhaps ten minutes, and less frequent tests of thirty minutes' duration be used.
- (3) On high school levels, examinations, final and others, should be limited to a maximum of two hours, and in most courses should be of shorter duration. It is especially important that the several examinations to be taken by any one student be scattered over a period of two or more days. Concentration of examinations, particularly finals, in the same day is not desirable at any school level.
- (4) Students should be helped to appreciate the educational values of examinations.
 - 5. Pupil observation

The importance of observation of pupils by the teacher to detect illness has already been pointed out.

6. Planned relaxation

Because of the variation in age, course of study, physique, physical stamina and length of school study periods, it is impossible to outline any systematic routine relaxation periods. These should be graded as is the educational system itself.

The solution is to rely upon teachers who have been adequately trained in health routines and health education by the teacher training institutions to appraise properly the needs of the class and to make the needed adjustments, either through practical application of techniques or through recommendations to the home.

IV. The Parents' Responsibility

General Comments

Parents should understand the work that is being done in the school and should make an effort to coordinate the work of the home and the school in the interest of the best growth and development of the child. The primary responsibility for the intelligent organization of the student's day rests upon the parent. Wise parents who need help should seek the counsel and assistance of the teacher who has had the benefit of training in the growth and development of children. Parents should seek to control the social pressures that are excrted on the child. Parents should see that a functional Parent-Teacher organization is set up in the school and that there is an opportunity for parents, teachers, and children to exchange ideas and coordinate all of their efforts in an educational program. Through adult education, parents should be taught to know and assume responsibility that is obligated by parenthood instead of forcing it onto the school system and other organizations and individuals.

Specific Recommendations

- 1. Parents should assume the responsibility for planning a well budgeted day with their children. The child's activities and work should be balanced against his energy and capacity.
- 2. Parents should pay particular attention to the need of the child for adequate rest and sleep. A regular and early bedtime hour is essential.
 - 3. It is necessary for all children to have adequate and leisurely meals.
 - 4. Some time should be provided for out-of-door activity.
- 5. Home duties should be budgeted in direct relationship to the energy demands made upon the student.
- 6. Extra demands on the child's energy such as music lessons should be taken into consideration.
 - 7. Study hours should be planned and be free from interruption.
- 8. Time should be provided for the high school girl for personal grooming.
 - 9. Time should be allotted for family relationships.
- 10. Every child should have some free time to pursue his own hobbies or to do whatever he may choose within the limits of approved social behavior.
 - 11. Time should be provided for the care of the personal self.
 - 12. Time should be provided for participation in community activities.
- 13. Parents should be at home or be responsible for the after-school time of their children.
- 14. Parents should help the child to avoid excessive emotional stimulation from sources such as radio programs, movies, bad parental conduct, harsh discipline, over-indulgence, and extra-curricular activities.
- 15. It is the parents' responsibility to plan relaxation periods for the child and eliminate any of the above health hazards if they are present.
- 16. Parents should recognize the limitations of their children as well as their abilities and not force the children into situations with which they are unable to cope.

V. The Student's Responsibility

As the student grows into adulthood, he should assume more and more his own responsibility for intelligent living and should gain in the ability to make intelligent health decisions. He should also seek to develop within himself a desire to live intelligently. Likewise, he should develop within himself an understanding and acceptance of himself as an individual with his capacities and limitations and an understanding of the role that he is to play in life.

Each student, as he approaches adulthood, should increase his ability to budget his own time and energy and limit his own activities. Students, as they mature, must learn to limit the social pressures made upon them by their peer group and set up their own standards of living. They should increase their ability in self-discipline in direct proportion to their age. Older students

should recognize the fact that their behavior has a tremendous influence upon the younger child and that by living intelligently, the older student directly influences the attitude and behavior of the younger children in regard to wise health and safety habits.

VI. The Community's Responsibility

The work of the school, home, and community should be coordinated in the interest of the child and his welfare. The community should seek to control the social pressures on the student in order to decrease the overstimulation of the individual. The community should also be informed about the activities in the school and feel free to call upon the educational institution for help. The community should, likewise, provide assistance to the school and the home in so far as health services, social welfare, and child guidance are concerned. Provision should be made in the high school student's day for community service of some kind.

A Healthful School Environment

Values and Objectives—Items of a Healthful School Environment—Descinencies—Suggestions for Assisting Achievement—Discussion of Items Affecting a Healthful Environment (Water Supply, Toilets and Waste-Disposal Facilities, Hand-Washing and Shower-Bath Facilities, Lighting and Interior Decoration, Heating and Ventilation, Seating, Screening, General Building Arrangement, Maintenance and Fire Safety, Construction of School Buildings, Food-Handling Facilities, Playgrounds).

The Goal

Every School with a Healthful Environment

and

Suitable Health Instruction in a Safe, Sanitary School Building

with

Adequate Indoor and Outdoor Play Space

I. Values and Objectives

Healthful surroundings for our schools have a two-fold purpose. Primarily, good health and personal safety of students and teachers are essential for proper physical, mental, and social development of our school children; secondarily, as a result of healthful school environment, the home life of the entire community may be greatly improved through indirect effect on parental education. Principles of good sanitation, such as the proper location and construction of wells and toilet facilities, sanitary handling of food and milk, safe dishwashing procedures, and good lighting, heating, and ventilating practices, all serve as desirable examples upon which the community may pattern its home environment. This is important in later years as the students attain adulthood in the community.

Unsafe drinking water at school may be responsible for serious illness as well as minor intestinal upsets, ordinarily not recognized as being water-borne. Improper lighting, with resultant eye strain, may greatly retard student progress. Malodorous toilets with obscene writing and caricatures, besides offending the aesthetic sense, have an unfavorable influence on moral development. Playground equipment is too often chosen only with the object of providing exercise and fun, little or no thought being given to the desired physical-education objectives of body poise, agility, skill, and certain social needs of some students, attainable through properly supervised team play. Some playground equipment may be of such design as to create definite hazards to personal safety of the users.

Efforts of school officials and civic organizations to correct malnutrition among school children by the establishment of hot-lunch programs are commendable. Proper equipment should be provided and food should be prepared and served in accordance with approved sanitary practice. These and

other items of school environment materially affect the physical, mental, and moral well-being of both students and teachers.

II. Items of a Healthful School Environment

Items which should be given consideration in a study of a healthful school environment are as follows:

1. Water supply.

2. Toilets and waste-disposal facilities.

3. Hand-washing and shower-bath facilities.

4. Lighting and interior decoration.

5. Heating and ventilation.

6. Seating.

7. Screening.8. General building arrangement, maintenance, and fire safety.

9. Food-handling facilities.

10. Playgrounds.

This report contains a brief discussion of each of the items listed above, which may be helpful as a guide in the study of individual school needs. Technical details are omitted because the inclusion of such details would necessarily require a voluminous presentation. Bulletins giving information on some of the items are now available for free distribution from the Office of the Superintendent of Public Instruction and the Illinois Department of Public Health which furnish technical details and minimum specifications to guide procurement of proper facilities. Technically trained and experienced personnel are also available from various State and local health and educational organizations to furnish free consultation and assistance in planning improvements.

It should be appreciated that the order in which these items appear above is not necessarily the order of their relative importance. This order may be expected to vary with the individual school conditions; however, it is generally conceded that the first two items, water-supply and toilet facilities, should receive prime consideration. Screening is always desirable, especially so where malaria is prevalent and Anopheles mosquitoes are numerous. Proper lighting should usually be placed high in the order of attainment. It is suggested that school officials should study each school individually with respect to school-environment needs and prepare an orderly plan for attain-

ment of needed improvements.

III. Deficiencies

Previous to the current war effort the Illinois Department of Public Health, through its sanitary engineers, had inspected the sanitary facilities at 7,000 of the State's public schools. Analysis of the inspection data showed that 88 percent of the water-supply facilities were defective and 54 percent of the school toilets were insanitary. Detailed data on deficiencies of heating, lighting, ventilation and similar items have not been compiled but from representative observations, there is ample evidence to substantiate the belief that there exists a wide-spread deficiency of some of the other factors essential to a healthful school environment. There is need for expansion and

modernization of Illinois school statutes concerning minimum physical facilities, and it is recommended that the Department of Registration and Education, the Department of Public Health, and the Office of the Superintendent of Public Instruction give further consideration to the need for modernization of school laws. There is now adequate legislation governing facilities for special aid schools and high schools. While there is need for legislation to require all other schools to provide at least a minimum of facilities in accordance with standards as prepared by the State Superintendent of Public Instruction, and provision of this legal requirement should be very helpful, statutory action alone is not enough to assure complete attainment of an ideal school environment. A comprehensive program of education and promotion is necessary, in which school and health officials throughout the State will cooperate and coordinate their efforts toward this objective. Such a program should include the active participation of all education and health officials of the State, cities, and counties.

IV. Suggestions for Assisting Achievement

Herewith are listed suggestions for the organization and execution of a program through which the attainment of healthful school environment may be assisted:

- 1. Wide publicity should be given to the values of healthful school environment and to the existing deficiencies.
- 2. Local school and health officials should be encouraged to hold local meetings and secure the support and cooperation of interested individuals and civic organizations.
- 3. The General Assembly should be requested to strengthen the laws governing school sanitation and to make provisions enabling the school to meet these new standards.
- 4. County superintendents of schools should be encouraged to hold local meetings with boards of directors and boards of education for the purpose of promoting needed school improvements, stressing particularly the items controlling school environment.
- 5. A group of schools in a given area may be encouraged to engage in competition in various activities relating to a healthful school environment.
- 6. The Office of the Superintendent of Public Instruction should be requested to consider the preparation of a school health appraisal form, to be used in the recognition of schools, pertaining to school-environment facilities.
- 7. The program of teachers' institutes should frequently include information and suggestions for the improvement of school environment.
- 8. Nontechnical bulletins presenting pertinent information on the school-environment problem should be prepared for general distribution to all school and health department personnel as well as to other interested persons.
- 9. Technical bulletins should be provided in fields not now adequately covered.

- 10. All possible encouragement should be given to promote the establishment of adequate local health departments, including the full-time services of properly trained and experienced personnel. Such individuals should possess tact and promotional ability as well as thorough technical preparation. All of these qualifications are essential for providing the necessary guidance and technical assistance to local school officials.
- 11. Teachers should be encouraged to use inspections of school facilities by visiting officials as class demonstrations. The collection of samples of water for analyses, and inspection of school wells, toilets, and foodhandling facilities, accompanied by tactful explanations from the inspecting health official, as he proceeds with his work, can be of extreme educational value.

V. Discussion of Items Affecting a Healthful School Environment

Water Supply

Most of the rural and small community schools utilize wells as a source of water supply and the majority of these wells have defects which subject the water to contamination. Although some of the defects are minor, many of them are serious (such as the location of non-water-tight sewer and drain lines in the near vicinity of wells) and could result in water-borne illness. Many such dangerous situations have been occasioned by the installation of indoor toilets in old school buildings. School wells are often located near the entrance to the schools, and inside toilets when added are generally placed in the cloak rooms, which are usually in the front part of the building structures. Under these conditions, drain lines from the toilets are commonly laid in close proximity to the wells and unless certain precautions are taken to construct sewer lines of assuredly watertight materials, there is grave danger that sewage from leaking joints in these drain lines may contaminate the water supply.

Some few schools have no water supply. In certain areas it has been found difficult to develop ground water sources, the geologic formations being such that an inadequate or highly mineralized and unusable water is obtained. At some such schools, the teacher or older pupils have been required to transport water, generally in an uncovered bucket, from neighboring homes. This practice may easily subject the water to contamination in transit and the quantity provided is often inadequate for hand-washing and other school purposes beyond the bare essentials for satisfying thirst.

In certain areas of Illinois where it is difficult to develop water from the ground, cisterns are utilized, rain water from the school-building roof being collected and stored in the cistern. Rain water from the roof is always subject to contamination by soot, dust, bird droppings and similar sources; and while it is possible to construct satisfactory sand filters to remove suspended material, such filters cannot be expected to remove dissolved organic matter and all contaminating bacteria. The final safety of the water, then, depends upon the use of chemicals such as chlorine. The proper maintenance of a cistern water supply requires extreme diligence and even when the best facilities are provided it is known that such maintenance is often lacking. Cisterns should not be used if any suitable form of ground water can be developed for schools.

Certain areas of the State are underlain with limestone that is filled with open channels, cracks, and crevices which convey water and likewise pollution for great distances underground without purification. Wells penetrating such limestone formations must always be regarded with suspicion, for much serious illness, including several notable typhoid fever epidemics, have been caused by water from such wells. To assure safety, water from these limestone wells should be either boiled or receive chemical treatment, such as chlorination, before use. Boiling, of course, with the necessary subsequent cooling, is decidedly inconvenient and cannot be expected to be performed at schools except under emergency conditions. Adequate chemical treatment of water obtained from wells equipped with hand pumps is largely dependent upon the personal element, and likewise cannot be expected to be continued for an indefinite time. Where wells are equipped with power-pump installations, automatic chlorine machines can

be purchased which will provide satisfactory disinfection of the water with a minimum of attention.

Use of the common drinking cup is often observed at schools where drinking fountains are not employed. Glasses, tin cans, soft drink bottles, and similar containers should not be left at the well pump where they may be thoughtlessly used in common by the students.

Urban schools employing water obtained from public water supplies have available a source of water under pressure that is, almost without exception, of safe quality and adequate in quantity. Public water supplies in Illinois have been subjected, for many years, to a rigorous program of inspections by sanitary engineers of the Illinois Department of Public Health, and most municipalities have cooperated admirably in this program of providing safe public water supplies. However, even though most urban schools employ, as a source, water from public supplies which is reasonably safe, it is often dispensed through drinking fountains of the unguarded vertical-bubbler type which permits lip drinking and the retention of bacterial contamination so introduced. Sanitary drinking fountains of the inclined-jet type equipped with guards to prevent lip drinking are reasonably satisfactory and, while many schools in recent years have installed such drinking fountains, there yet exist many that are of the improper type. There is need for school instruction in the proper use of drinking fountains.

Installation of other improperly designed plumbing fixtures makes possible back-siphonage of contamination into the water-supply lines at times when water pressure may drop, which can occur on any water system. Hand-washing lavatories equipped with water faucets, the discharge outlets of which are located below the top of the wash bowl, are subject to submergence by contaminated water in the bowl, and under such conditions, if a partial vacuum exists in the water lines, occasioned by a drop in the water pressure, contamination can be drawn directly into the water pipes. Similar conditions can exist on improperly designed toilets and other plumbing installations. Most manufacturers of plumbing equipment have cooperated admirably in recent years in recognition of this public-health problem, and are now producing plumbing fixtures and equipment which prevent the possibility of backsiphonage occurrences. However, improper fixtures are still made and sold. All new plumbing fixtures, when purchased, should be specified as of a type approved by the proper health authority.

Schools located in small cities and villages not provided with public-water-supply facilities usually employ private-water-supply sources similar to those of rural schools, and many of these school water supplies are improperly located and constructed. While such schools usually have electric power available and have frequently developed water-pressure systems, the water obtained from wells, cisterns, and similar sources is often found to be impure. Many schools likewise have improperly designed drinking fountains and plumbing fixtures.

The ideal situation for all schools, whether urban or rural, is the utilization of some sort of pressure water supply, for this makes possible the use of inside water-flush toilets, sanitary drinking fountains, and adequate hand-washing facilities.

Any school having access to a public water supply should employ it in preference to the development of a separate water source. Schools beyond the reach of public water-supply facilities can provide private water supplies by the use of electric or gasoline power.

All private school water-supply sources should be checked by bacteriological analyses at least once annually, and more frequently if the water is of doubtful sanitary quality.

Toilets and Waste-Disposal Facilities

The community sanitation program conducted through the Federal Works Progress Administration in recent years has been responsible for considerable improvement in the sanitary status of outdoor toilets at schools. However, survey data show that more than one-half of Illinois' schools still have insanitary toilet facilities. The majority of rural schools and many small urban schools still employ outdoor-type toilets. From a strictly public-health standpoint such outdoor toilets can be located and constructed satisfactorily but, from the aesthetic, moral, and educational standpoints, inside toilets are desirable for all schools. Outdoor toilets are often neglected and the interiors of the structures are frequently unclean. Outdoor toilets, when used, should be properly

located at distances somewhat remote from the school building, but such location makes their use inconvenient during inclement weather. Students frequently defer using these toilets, to their own physical detriment, because of the remote location or filthy condition. Teachers should exercise proper supervision over the use of outdoor toilets to eliminate certain undesirable practices, including obscene writing and caricatures on the toilet walls.

There has been developed in recent years a so-called "septic toilet" produced as a manufactured unit which can be installed inside school buildings and which gives reasonably satisfactory inside toilet convenience. This toilet operates without water pressure, although about one bucket of water per day is added manually through each seat opening. These toilets, if provided with the minimum maintenance necessary, are reasonably free from objectionable odors. The septic toilet is preferable to the chemical toilet.

A few chemical toilet installations still remain in Illinois schools. Their construction is similar to the septic toilet mentioned above, and when properly maintained, the chemical toilet can be reasonably satisfactory. However, because the proper maintenance involves periodic removal of material from the toilet tank and recharging with chemical, such maintenance is usually neglected and obnoxious conditions frequently result.

Large urban and some of the larger rural schools have water-flush-type toilets with discharge of sewage into a municipal sewer system or to some type of school sewage-disposal system. Design of sewage-treatment facilities is highly technical, and engineering assistance is desirable.

Illinois law requires that plans for sewerage installations serving fifteen persons or more shall be submitted to the State Sanitary Water Board for review and issuance of a permit before any contracts are let or construction work started.

The ideal school toilet facilities consist of inside water-flush toilets located in clean, adequately heated, well lighted, and ventilated rooms.

Hand-Washing and Shower-Bath Facilities

Equipment to permit pupils to wash their hands is essential for proper cleanliness and is necessary to the teaching of good personal hygiene. A common water bucket with wash bench and basin can be satisfactory in the smaller schools if kept clean and under proper supervision. However, a water dipper, essential to the use of such meager equipment, should never be used as a common drinking cup. Adequacy of such equipment depends largely on proper supervision by the teacher. Common towels have been almost completely eliminated and use of paper towels is quite universal.

The teaching of students to wash their hands after use of toilets should be a major educational objective, and hand-washing facilities should be located adjacent to toilets. However, this is ordinarily not feasible when outside toilet facilities are provided. Hand-washing lavatories, with water available under pressure, accompanied by paper towels and liquid soap dispensers, installed in close proximity to inside toilet facilities, make the ideal installation.

Bathing facilities are ordinarily found in Illinois schools only in conjunction with athletic or physical education programs, and usually in the larger schools. Most elementary and rural schools do not have bathing facilities. There is wide need for providing shower-bath facilities at all schools and the development and adoption of programs to encourage daily bathing of all pupils. Existing shower-bath facilities are reasonably well-designed and maintained, with the exception of control of athlete's foot, which item should receive extensive study and greater attention. The practical difficulty of providing hot and cold water under pressure at all rural schools is recognized as a principal obstacle in the universal adoption of daily school bathing programs.

Lighting and Interior Decoration

Satisfactory natural light within school rooms is dependent upon proper building construction and seating arrangement, including sufficient window area and proper window shades. However, regardless of good building design, natural light only cannot give perfect lighting at all times and some form of artificial light is necessary on dark days. While some rural schools are equipped with electricity, the majority of

rural schools do not, as yet, have access to electric power, although schools almost universally install electricity when it is available. While some good gasoline lights are available, when provided, they are not often used, except under extremely dark conditions, because of the inconvenience. School official, should study the possibilities of obtaining more adequate natural light by installing additional windows and by removing trees that may interfere with natural lighting.

In general, electric lights provide the only entirely satisfactory source of artificial light. The rural electrification program of recent years has improved lighting facilities at schools, but it is still far from universal. Continuation of the electrification program

is expected after the war.

Electricity makes artificial light always available with the flick of a switch, and teachers readily take advantage of this convenience by extensive use to satisfy any deficiency of natural light. However, many schools with electric lights do not have the best fixtures to give proper light intensity and distribution. There is opportunity for considerable improvement in existing school lighting through modernization of electric light facilities.

Color engineering and the entire field of interior decoration offer much that promises to improve school environment. Dark, oily floors and dull, gray walls, so commonly found in many schools, absorb light and do not produce an inviting or attractive learning environment.

Heating and Ventilation

Heating in the majority of schools, both urban and rural, is reasonably satisfactory. The larger schools are equipped, almost without exception, with modern furnaces which either employ steam radiators or deliver warm air through a system of ducts. One-room schools generally have stoves of the jacket type which ordinarily provide satisfactory heating except in very cold weather.

Ventilation is not always adequate as the facilities now exist. Window boards or shields should be provided when window ventilation is improper, and dampers on fresh air inlets should be kept in good order to assure proper control. Such fresh air inlets are usually arranged in conjunction with the heating system, and when these inlet dampers are not in proper working order an attempt to obtain good ventilation results in a draft on the floor.

Adequate humidity control is generally lacking and, while equipment is frequently provided to add some moisture to the air when the heating system is operated, experience indicates that during the heating season the humidity is usually too low. On the other hand, in the early fall and late spring when heating is not employed, high natural temperatures may prevail and, likewise, humidity above the comfort zone frequently exists. High room temperatures, especially when accompanied by high humidity, so common in the Mississippi Valley, are not conducive to concentration and study by either pupils or teacher. With the increasing use of air-conditioning equipment it appears that the installation of modern air-conditioning facilities at schools is warranted, and the future should see wide application at Illinois schools.

Seating

Movable and adjustable seats are preferred. The seat should be on a swivel which permits turning through a horizontal plane of at least 30° to the right or to the left. If nonadjustable seats are used, provision should be made for variation in the size of pupils. The seats should, of course, be kept in good condition.

The aisles between rows should be at least eighteen inches and the aisles between rows and walls should be at least twenty-four inches wide. There should be at least six to eight feet between the front row of seats and the front wall. Unused seats and desks should be removed from the room. The seats should be placed to take advantage of the best lighting (at an angle of 20° from the windows and as close to the windows as possible). Single seating is required by law.

The pupil should sit well back, so that his lower back is comfortably supported by the back of the chair. He should sit with his spine erect, and his head and upper body should be in good balance with both feet on the floor. Correct sitting posture may be impossible in a poorly designed chair.

Screening

Window and door screens not coarser than sixteen mesh should be installed on all Illinois schools to exclude flies and mosquitoes. Besides the public-health hazard of disease transmission by flies and mosquitoes, these insects may be of considerable annoyance to both teachers and pupils during class periods. Good housekeeping today stipulates the screening of homes. The screening of schools should then be practiced if for no other reason than to teach this item of good housekeeping.

General Building Arrangement, Maintenance, and Fire Safety

Condition of school buildings throughout the State, in general, is good. Although there are a considerable number of old school buildings remaining in use, for the most part these have been modernized by providing new floors, movable and adjustable seats, book shelves, storage cupboards, and light-tinted walls. Much more attention should be given to providing adequate storage space in the original construction of school buildings, as well as when older buildings are remodeled. Some one-room rural schools still retain the old window arrangement where windows are located on opposite sides of the room, although the majority of these have been provided with means of masking the lower portion of one set of windows. Cross-lighting and seating arrangements requiring pupils to face the light should be eliminated in all cases.

The type and condition of the floors in the school building is directly related to the health, comfort and safety of the student. The types of floors that are apparently giving the most satisfactory service in schools throughout the State are hard maple, terrazzo, asphalt tile, rubber tile and battleship linoleum. For years linseed oil and paraffin base oils were used on maple floors but with poor results because they not only created additional fire hazards but also turned the floor dark and unsightly. However, today there are many types of penetrating floor seals that if properly applied make a splendid looking floor and also provide a durable finish.

Terrazzo floors are attractive, can be obtained in various colors and do not require as much maintenance as most other types of flooring. Application of a terrazzo seal after cleaning this type of floor makes it very easy to keep in first class condition and will prevent the floor from dusting. Asphalt tile and rubber tile floors can be recommended for any parts of the school building except where dampness is encountered, such as basements, or where the desks or equipment are fastened to the floor. With occasional scrubbing and regular waxing, an excellent looking as well as a durable floor is assured. Floor seals and wax should be purchased because they are suited to the local situation; no attempt to select a single type for the whole State should be made.

Urban school buildings throughout the State are generally new or quite well-modernized, but some unmodernized school buildings do exist, where funds have not been made available for the construction of new buildings, and some of these still have dark walls with wide floor boards and poor window arrangement, but these are now the exception.

Some overcrowding exists in urban schools, especially in certain heavily populated areas. This creates a difficult problem in many localities which may be solved by adequate building programs.

Good housekeeping at school is important not only because of its direct relationship with the health and safety of students but because of the influence it may have upon the attendance of all concerned. Responsibility for the prevention of untidiness should be the concern of all members of the staff rather than that of the custodian alone. Not enough attention is paid to this subject and the general housekeeping standards can be greatly improved in many school systems.

Fire safety at schools throughout the State is reasonably well-provided for, as evidenced by the long record of no disastrous school fires with loss of life. Old school buildings, both urban and rural, which still exist have been universally provided with doors that swing outward and equipped with panic bolts, as required by law; a second entrance has been provided, although this emergency exit door is frequently found locked during the school day. Schools are reasonably well-equipped with fire extinguishers, and the larger schools with water pressure have fire hose. Occasionally such fire-hose installations have become too old to be serviceable. Fire drills should be regularly practiced and fire escape doors should not be locked during the school day.

Construction of School Buildings

When new school buildings are constructed, the plans should be developed with full appreciation of modern school function. The first principle of any school plant is to provide facilities for learning. The functional planning of school buildings is based on this principle. The architectural style should be secondary. Plans for new school buildings should be approved by the county superintendent in county schools, city building authorities in city schools and the Office of the Superintendent of Public Instruction. Further state-wide requirements are needed.

Health is one of the cardinal objectives of education and should be considered in that position in the planning of school buildings. The provision of gymnasiums, lockers, and bathing facilities alone does not fulfill that obligation. Health is more than physical education. The building should be planned so that it may be built and maintained to create healthful living habits.

Functional planning comprises more than the right number of rooms arranged economically in a general plan. Proper lighting, heating, and ventilating are health factors vital to the plan. The use of the proper materials for constructing the component parts of the building to provide a safe, sanitary, and easily maintained structure is as important as the proper placing of rooms.

The elimination of basement areas in modern school houses for any use except mechanical equipment and storage is a step toward more healthful and sanitary buildings. The location of toilet rooms, with facilities for hand-washing and drying, is far more important than the total number of toilet fixtures in the building. Making the facilities readily available will bring much greater use of them. Proper facilities and training in our public schools will create health habits which will be practiced long after details of specific courses are forgotten.

Food Handling Facilities

There is increasing recognition of the value of serving hot lunches at schools. The intention of those in charge of serving food at schools is commendable, where every attempt is made to serve nutritious meals in the most sanitary manner within the limits of the equipment available. Persons in charge are usually those who have had either training in home economics or who apply the best-known practice of home housekeeping methods; and, in general, extreme cleanliness is exercised. While the attention given to sanitation in preparing and handling foods at schools is on a higher level than the present-day food handling in commercial restaurants and other public eating places in the State, there are some general deficiencies observed in school food-handling procedure. Instruction in food sanitation should be provided for all food handlers. Some items which should be checked in the handling of foods in schools are food-handling and food-serving facilities, dishwashing methods, health of those handling and preparing foods, refrigeration, storage of food and utensils, and availability and use of pasteurized milk.

Although the prime object of good sanitation in the serving of food at schools is to protect the health of the pupils and teachers, a very important indirect objective is the education of pupils in the proper methods of food preparation, storage, dishwashing and similar subjects in order that such items may be placed in practice at the home and throughout the community. Whenever food is served at schools, the facilities provided and procedures employed should be the best known to nutritional and sanitary science. Children who bring their lunches should have a suitable place in which to eat them.

Playgrounds

While most schools, both urban and rural, in Illinois, have some type of play-ground equipment, as a general observation there has been a tendency to provide heavy, expensive equipment such as swings, slides and giant strides, and once the equipment has been supplied, too little thought has often been given to the supervision of the students while using it or to teaching them how to acquire new skills on it. Heavy playground equipment is not essential, although there may be no objection to some such equipment if it is wisely chosen and instruction is supplied, in addition to ball diamonds, volleyball and basketball courts, and other facilities which permit supervised team play. The acceptance of playground equipment standards as

set forth by the Office of the Superintendent of Public Instruction, the National Recreation Association and the American Playground Association is recommended.

All-weather playgrounds of adequate size should be provided so that play periods will not be affected by rain, snow or excessive dust. Adequate consideration should be given to the type of surface provided as this is extremely important. Cinders are not desirable. Adequate drainage should likewise be given attention by the proper school authorities. In order to minimize the opportunities for accidents to the younger children while on the playground, some separation of the students on the basis of age is desirable.

School Health Services

Health Examinations (Scope; number of students examined per hour; presence of parent, nurse and teacher; the role of the teacher; vision testing; testing hearing; testing speech; dental examinations; examinations in the office of the private physician; referrals between routine examinations; examinations just before entering school; examinations for athletes; pre-employment work certificates)—Procedures for Follow-Up After Health Examinations (At the school; the use of clinics; special classes; provision for handicapped children; nurse-teacher conferences; evaluation)—Health Records—Communicable Disease Control (Communicable disease chart; the tuherculosis program; teacher observation; procedures for exclusion; procedures for re-admision; immunization program; epidemics)—Safety and First Aid.

I. Introduction

School health services encompass a broad field and represent a tremendously important part of the school health program. They provide some of the most vital health experiences of the pupil—experiences which directly affect his health and which shape his knowledge, attitude, and health practices. Health services are particularly important in shaping pupil attitude toward health. Teachers and principals must know what the health services are in order that they may cooperate effectively with those who render school health services, and make use of these services in the educational program. The teacher needs to know what each of the health specialists does for the child, what the specialist does for the teacher, and what is expected of the teacher. The medical, dental, and nursing professions, and the rest of the community should also know what the school health services are.

II. Health Examinations

General Discussion of the Physical Education Law Prescribing Health Examinations in All Schools

The *Illinois Revised Statutes*, 1943, Chapter 122, Section 523.4 state: "As soon as practicable physical examinations as prescribed by the Superintendent of Public Instruction with the advice and aid of the Department of Public Health shall be required of all pupils in the public elementary and secondary schools except as hereinafter provided immediately prior to or upon their entrance into the first grade, and not less than every fourth year thereafter. Additional health examinations of pupils may be required when deemed necessary by the school authorities.

"Such examinations shall be made by physicians and dentists licensed to practice in the State. Cumulative records of such examinations shall be kept by the school authorities." Exceptions to the law are specified.

Such examinations may discover abnormalities and be an educational health experience for the parents and child. Local school authorities, health

department personnel, doctors, and dentists will, of course, be guided by and comply with the standards and regulations established by the Superintendent of Public Instruction. Such standards and regulations usually represent minimum satisfactory conditions, whereas many communities can maintain, and all communities should strive for, higher standards than those set in minimum regulations. It is recommended that local school authorities, local health authorities, and local medical and dental professions cooperatively plan and carry out a health examination program, not merely to comply with the law, but in order to bring to the children and the community the greatest benefits possible.

The Scope of the Health Examination

The examination should be broad enough in scope to discover all abnormalities which can be detected by observation, and should include: (1) a careful physical examination and a careful history, with tests for vision, hearing and speech (which may be done by teacher or nurse); (2) a consideration of those subjective and behavior problems called to the examiner's attention by the teacher, nurse, or parent; and (3) the presentation to the parent of a practical amount of health information by the examiner at the time of the examination.

The evaluation of all findings should be summarized by the examiner. If there are definite abnormalities needing correction, these should be called to the attention of the parent, and some means used to motivate the parent to consult the family physician for verification and correction, or for extending the scope of the examination if needed. School health examiners should take as much time as is practical to make the examination interesting and educational to the child, teacher, and parent; and the entire procedure should be a pleasant health experience which should influence the child and parent to demand good medical care and motivate them to more healthful living. Detailed individualized education is probably not a primary objective on the part of the physician. However, he should take time to explain the implications of deafness or serious defects, and to answer all questions. In group programs it may at times be desirable to talk to the group or class as a whole on important or prevalent defects or problems.

It is recommended that the child be stripped to the waist,* with the shoes off. The pupil should be examined from head to foot, including the genitals in the boys. A reasonable degree of privacy and segregation for the examiner, the patient, and the parent is essential if best results are to be obtained. Privacy is easy to obtain in a physician's office; it is sometimes difficult in a one-room school. With sufficient privacy, a stethoscope, otoscope, nasal speculum, tongue depressor, and a good light, and with the child stripped before him the examiner can observe the expression, mannerism, alertness, skin texture and muscle firmness, as well as physical defects. He gives consideration to the history, subjective symptoms, and behavior.

The Number of Students Examined per Hour

It should be obvious that an examination of the scope mentioned above cannot be made in a minute and the mother and the patient dismissed with

^{*} A garment or robe should be worn by the older girls.

an encouraging pat on the back; nor can a one-minute meeting with parent and child be expected to influence future health practices favorably; neither can the parent be expected to hold such an examination in very high respect.

In general, it is recommended that an average of from ten to fifteen minutes per child be allowed as the period during which the parent and child are with the examiner, exclusive of the time necessary for vision, hearing and speech testing, weighing and measuring, and time consumed in other routine preparatory work. Notes should be made at the time. If more than six examinations per hour are scheduled, all parties concerned should clearly understand that some valuable features of a health examination are being sacrificed.

Presence of Parent, Nurse and Teacher at the Examination

The parent should be present at the examination if possible. Exceptions might be made in some programs, such as examinations of athletes and work examinations. A nurse should be present. She can do the recording and later can intelligently discuss and review cases with the teacher and parent. The teacher may or may not be present depending upon the age and sex of the child, the familiarity of the teacher with the program, and the cooperation which has been developed between the physician, nurse and teacher for future handling of problems. There is greater need for the teacher to be present when a child who is known to have health problems is under examination, because of the intimate knowledge she has about the child. Her big job is before and after the examination, although presence at the examination should be used to increase her knowledge of the routine of the examination, and to increase her ability to discover defects. Of course, the defects or conditions found should be reported to her in most instances.

The Role of the Teacher in Preparing the Class for the Health Examination, and at the Time of the Examination

The teacher should have an intelligent attitude toward health and toward the whole procedure of health education and examination. If she does, the children will not fear the examination; indeed they will be eager and interested. If she doesn't have this attitude, poor results can be expected, even when the program is otherwise fairly good.

Aside from the psychological approach to the examination, the teacher, with the help of the nurse, should have time to prepare her pupils otherwise. She is expected to perform the screening tests of vision, hearing and speech, to weigh and measure students, to note absences and their causes, to note behavior problems, to note other abnormalities, to make observations for contagion and other illnesses, and to record corrections. The teacher is the key person in the health teaching and child health guidance program. If she performs her part well, the class will be ready for the examination with much valuable information available to the examiner. The teacher should see that her pupils report promptly and in orderly fashion for the health examinations.

Plans for Vision Testing

Plans for vision testing should be worked out cooperatively by the local school authorities, local health departments, and perhaps other agencies. The Illuminated Snellen and Astignatic Eye Charts serve well for the discovery of cases of near-sighted or mixed vision, but many children who are far-sighted will be detected by other observations by the teacher, such as frowning, indisposition to study, and straining. Teachers can be trained to give vision tests and experience has shown that they may be relied upon to perform the tests accurately.*

Plans for Testing Hearing

Hearing testing should be included in physical examination programs. If a child has an unrecognized loss of hearing his work at school is affected, he may be unnecessarily handicapped outside of school, and his chances of satisfactory adjustments are impaired.

The approved method of testing hearing is by a group test with the audiometer, followed by individual testing with the Puretone audiometer for selected pupils. It is recommended that the type of testing programs to be used be determined jointly by the local school and health authorities and medical societies.

Plans for Testing Speech

Simple screening tests for the more obvious defects of speech are available through such organizations as the American Speech Correction Association. They may be used effectively by teachers or nurses to discover children handicapped by defective speech and to facilitate referral to treatment sources. Speech defects are serious handicapping conditions and should not be ignored.

Plans for Dental Examinations

Every child should have a dental examination by a dentist at least once a year. An x-ray examination should be made wherever feasible to fulfill the requirements of a comprehensive dental examination.

Local dental groups in cooperation with school authorities should decide where dental examinations are to be held—whether in the schools or in the offices of private practitioners. Studies have shown that as complete corrections can be secured by an educational program through which all of the children go to the office of the private dentist, or the dental clinic, as by a program where examinations are made in school. The examinations by the dentists should comply with the standards established by the Division of Public Health Dentistry of the Illinois Department of Public Health.

Health Examinations in the Physician's Private Office

Experience has shown that promotional work by health personnel, educators, and others tends to motivate a large percentage of people to take their children to their own physicians for routine physical examinations. It is

^{*} Solving School Health Problems, Dorothy B. Nyswander, p. 194, 1942, The Commonwealth Fund, New York.

possible that the response will be even better as an eventual result of the enactment of the Illinois law requiring physical examinations for school children.

If the examination is to be made by the family physician he should be well informed regarding the objectives of the school health program. He should record his findings on the health record card furnished by the school in order that the examinations may be reported and carried out in a uniform manner.

The main advantages of this plan for pupil health examinations are:

- 1. That it accomplishes the objective of getting the pupil under the supervision of the family physician by one direct move.
 - 2. That it retains the valued individual physician-patient relationship.
- 3. That it maintains or develops the sense of parental responsibility for such services.

The main disadvantages are:

- 1. That lack of uniformity often occurs in the findings and the reporting of these findings.
- 2. That there is a tendency of certain pupils to complain of illness in the hope that the family physician will be sympathetic and willing to request that the pupil be excused from the usual physical education activities required by law.
- 3. That there is usually a tendency to under-emphasize health educational possibilities.

Much thought and experimentation are needed in exploring the possibilities of this plan because it should prove very effective if the weaknesses could be eliminated.

It is recommended that the local health authority, the local school authority, and the local medical and dental professions cooperatively work out for each county or other suitable jurisdiction a plan which will accomplish the desired results.

Referrals for Examination Between Routine Class Examinations

Selected children will need examinations between the scheduled examinations which the law requires "not less than every fourth year." In most cases the teacher will initiate the action which will ultimately result in the selection of a given child for non-routine examinations. The teacher should have the benefit of consultation with a public health nurse and the two should then work together in selecting pupils for reference to a physician or dentist. The closer the cooperative relationship between the teacher and nurse, the better will be the results obtained.

Plans for the Examination of Pupils Prior to Enrolling in School

It is suggested that emphasis be placed on pre-school examination during the summer months just prior to the admission to kindergarten or first grade. Whatever record forms are used for the examination of children in school should also be used for pre-school children.

Examinations for Athletes

All candidates for the school athletic teams should be examined by a doctor of medicine. The physician should state that the pupil is or is not physically fit to take part in the designated sports. If the pupil is unfit for the designated sports, the physician should indicate the activities in which he might safely engage. The physician's statement should indicate on standard forms how completely the pupil was examined.

Following an injury or an illness during the same season, the pupil should be re-examined before participating again. Examinations should be repeated each year, and approval for participation in one sport should not be transfer-

rable to a more strenuous sport.

Examination of Children Leaving School and Requiring Work Certificates Before Employment

The examination of children leaving school and requiring work certificates should comply with principles evolved for health examinations generally and be similar to them in extent. The physician should know the type of activity into which the child expects to enter. The employer who employs a pupil with defects not incompatible with the job he is to take, but possibly incompatible with jobs to which he could be transferred, should also be advised of the pupil's physical condition.

The pupil should be given as many tests, other than medical, as competent examiners are present to administer; such as intelligence, psychological, aptitude and placement examinations. From the results obtained, the pupil should be guided into work in which he may expect to be reasonably successful and work that will continue to be a challenge to him. If that type of work is not available to him, an attempt should be made to maintain or develop his interest and guide him into suitable lines of work through study in evening schools and similar activities, if at all possible.

III. Recommended Procedures for Follow-up After Health Examinations

All pupils, regardless of economic status, should have adequate medical and dental attention. The objectives of the follow-up program are: to inform the pupil, his parents, and interested faculty members of the findings of the examination and their implications; and to place every pupil under the supervision of a private physician and a private dentist, or to arrange for supervision by a clinic.

Procedures in Following Up the Examinations Made by the School Physician at the School

The most effective plan includes a health conference at the conclusion of the examination, at which time the physician discusses with the pupil the status of his health. It is often desirable that the parent be present at the examination. If defects are found, the pupil should be placed under the care of a physician, dentist or clinic.

In each community the school or school system, and the local health department having jurisdiction, should work out together a satisfactory system of follow-up. The system should be well understood by both of the agencies; should include adequate nurse-teacher cooperation with regard to individual cases; should make maximum use of services available from both the school and the health department to influence the family to have corrections made, or to assist family to do so; and should avoid useless and wasteful duplication of effort. As a result of such working together, goals in school health can be achieved which will surpass expectations.

The Use of Clinics

The use of clinical facilities will, of course, vary according to the economic status of the individual pupils and the socio-economic resources of the various communities.

In most communities there are, economically speaking, three groups of pupils to be considered: first, those who can afford to make use of the services of physicians and dentists; second, those who can pay in part for these services; and third, those who must have the necessary medical and dental work done without charge.

Each group presents an entirely different problem to the school health service. The first group needs only the routine of informing pupil, parents, and physician or dentist, and a check-up to see that the defect has been remedied or is receiving treatment. For the second and third groups it is recommended that the school, health department, welfare department, and allied agencies examine their resources, and organize a system which will bring needy and marginal children under medical and dental care and make available to all, as needed, other related community services and facilities.

One community has solved this problem on a city-wide basis through a connection with the city welfare department which makes home investigations and keeps available a city-wide file of family economic information. On the basis of this information the various schools recommend partial payment patients to panels of physicians and dentists.

Some schools have set up service-club-sponsored health loan funds to help in such programs. The bill is paid from the fund at once, and the pupils or their parents repay the fund over a period of months, or the pupils work out the bill as student aid.

In other instances no repayment is required, and the fund is not used on a loan basis.

Other pupils found unable to pay for medical or dental services are referred to a clinic. Regardless of economic status, school-wide clinics or surveys are carried on in many schools. These include tuberculosis case-finding (with x-rays), vision tests, hearing tests, vaccination against smallpox, inoculation against diphtheria and nutritional guidance. All resources available in the community should be used in order to carry on an adequate and effective program.

Standards and Policies for Special Classes

A special program is needed for children who for some health reason cannot be instructed in the regular school program. Most of the State services for aiding the handicapped have been set up on the basis of the "special class" approach. In the last five years the various State departments, and other agencies charged with administering this program, have been experimenting with a new approach. Handicapped pupils are encouraged to use the regular facilities as much as possible, with guidance and help from specialists and other workers in this field. The results of these experiments seem to indicate that much can be gained from making contacts for the handicapped as normal as possible. If these pupils are segregated in groups, and their handicaps are emphasized, they tend to become "different," and more conscious of the fact that they are "different" from other pupils.

The following policies might well be adopted on a Statewide basis:

1. Education and living for the handicapped should be made as normal as possible.

2. Specialists should be available who can give extra attention to

these pupils over and above the regular school program.

3. Adequate equipment should be available.

4. Arrangement should be made for special classes, special service, and home instruction where the regular program cannot be adapted to

the handicapped pupil's needs.

State funds are available to pay for these services. Superintendents are urged to become acquainted with the opportunities for their schools which these special State funds offer, by consulting the State Superintendent of Public Instruction.

The Program for Handicapped Children

General information concerning the resources of the State for handicapped children may be obtained from the Illinois Commission for Handicapped Children, an official State agency charged with responsibility for the over-all coordination, integration, stimulation, and promotion of more adequate serv-

ices for all types of handicapped children.

The Commission has no resources for rendering direct services, such as medical care, education, or vocational training or placement to individual handicapped children. These services are the responsibility of the several established departments of the State government. The Commission functions more particularly to stimulate all private and public efforts throughout the State in the care, treatment, education, and social adjustment of handicapped children and to coordinate such efforts with those of the State departments and offices into a unified and comprehensive program.

The Commission's office serves as a clearing house for information, advice, and technical consultative services to parents, school officials, health and social welfare workers, rehabilitation and placement workers, and others interested in the care, education, and social and vocational adjustment of

handicapped children.

The Nurse-Teacher Conference

Nurse-teacher conferences dealing with the health problems of individual pupils or of the class should be arranged. Time for this conference should be allowed in the teacher's schedule. All parts of the school health program, including the nurse-teacher conference, should be approved by the school administrator. Evaluation of the Follow-up Program

The County Superintendent of Schools should request from each rural or other school system an annual summary of health records and corrections to show just how effective the follow-up program has been. The summary should also show the statistics on tuberculin testing, x-raying, smallpox vaccination, diphtheria inoculation and individual health conferences. From time to time special surveys should be made.

IV. Health Records

The Recommended Health Record Cards

It is recommended that all Illinois schools use the following single standard "Examination and Health Record" card approved by the State Department of Public Health and the Office of the Superintendent of Public Instruction:

SCHOOL REALTH RECORD

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WEIGHT AND HEIGHT RECORD-GRADE.

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ILLINOIS STATE DEPARTMENT OF PUBLIC HEALTH

In addition to the health record and examination form, it is recommended that a standard teacher's "Health Record of Pupil" card be used by all schools in the State. The value of such a cumulative record kept by the teacher has been amply demonstrated in a number of communities and, when properly used, it becomes one of the fundamental activities of the school health service.

A third type of form which is recommended for an adequate school health program is the "Annual Summary" card. Showing at a glance the health record for an individual child over a period of years, this form quickly orients the doctor, nurse or member of the school staff with regard to the student's major health characteristics.

TEACHER'S RECORD OF PUPIL HEALTH

Parent												
SEMESTER RECORD												
GRADE	SCHOOL F		Ht.	Ht. Wt.		Vision hout sses		ith sses	de Teeth	Hear- ing Audi- ometer Score		Teacher Notation on Pupil Health or Behavior
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-	DENTAL CODE:—D—DEFECT T—TREATMENT INSTITUTED C—CORRECTED N—TREATMENT NOT NEEDED											

ILLINOIS DEPARTMENT OF PUBLIC HEALTH

SEMESTER RECORD GRADES EYES Inflamed..... Eyes Water..... Styes, or Crusted Lids...... Eyes Crossed Rubs Eyes. Blinks Frequently..... Squints Eyes..... Close or Far Reading **EARS** Failure in Hearing..... Discharge from Ears..... Earache.... Picking at Ears.... NOSE AND THROAT Chronic Cough..... CO FOR POSITIVES Frequent Colds..... Frequent Sore Throat. BEHAVIOR Twitching..... Restless..... MARK Nervous..... Emotional.... Shy. Uncooperative..... Quarrelsome Visits Toilet Unduly...... Speech Defect. GENERAL CONDITION Lack of Color (Skin) Underweight—Thin. Overweight—Fat..... Poor Posture..... Tires Easily..... Unhealthy Appearance..... Poor Muscular Coordination..... HEALTH HABITS Poor Sleep Habits..... Poor Food Habits...... Poor Hygiene. PUPIL'S RECORD Scholastic Standing..... General Health Condition.... Scholastic Standing

SCHOOL HEALTH PROGR

CODE

General Health Condition -E(Excellent)-G(Good)-F(Fair)-P(Poor)

ILLINOIS TEACHER'S ANNUAL SUMMARY OF PUPIL HEALTH

Name	Date of Birth	.Month	Day19
Parent	Address		

ANNUAL HEALTH RECORD

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GRADE	DATE	PARENT COOPERATION			EN'	H VIII	HORO	ME	ENT			E)	NVI	OCRO	CIA	L	rn i		-
TEACHER'S	NURSE'S COMMENTS						• • •												

ILLINOIS DEPARTMENT OF PUBLIC HEALTH

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EARS	Normal. Symptoms. Physician Consulted. Results.		• • • •		• • • •	• • • • • • • • • • • • • • • • • • • •			••••	• • • •			• • • • •
NOSE AND THROAT	Normal. Symptoms. Physician Consulted. Results.			• • • •									• • • • • • • • • • • • • • • • • • • •
BEHAVIOR	Physical. Mental. Emotional. Reactions.			• • • •	• • • •		• • • •	• • • •	• • • •				
GENERAL	Physique. Stamina. Appearance. Disposition.		• • • •	• • • • •					• • • • •				• • • • • • • • • • • • • • • • • • • •
HEALTH	Moral Cleanliness Physical Defects Mental Defect							• • • •	• • • •				• • • • • • • • • • • • • • • • • • • •
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Use Code:—E(Excellent)—G(Good)—F(Fair)—P(Poor) Under Progress Report.

The Use of the Health Record Cards

The place where school health records are kept, their availability, and their transmission to the new school when the child changes location are matters that deserve special attention.

One person in every school should be held responsible for the preservation of the health records. It is strongly recommended that these records always be in custody of the school and available to the teacher, otherwise their value would be greatly limited. This may necessitate the keeping of duplicates, as a principal or nurse may desire the records for central filing. The forms should never be in the hands of the pupils, as they may contain confidential information. The teacher's "Health Record of Pupil" cards should be kept in the teacher's desk. The health forms should follow the student to a new school, including high school, as a part of his school record. They should be treated as confidential records.

V. Procedures for Communicable Disease Control

Wall charts concerning the administrative control of certain of the more common communicable diseases are available from the Illinois Department of Public Health and should be freely distributed throughout the schools of the State.

The Tuberculosis Program

It is recommended that the tuberculosis program in the schools be conducted in accordance with the following recommendations of the Division of Tuberculosis Control of the State Department of Public Health, and with whatever revisions or suggestions for tuberculosis control programs may be forthcoming from the Department in the future.

It is a recognized fact that very little actual active tuberculosis will be discovered among grade school children by tuberculin testing surveys. It is therefore recommended that tuberculin surveys be confined to kindergarten or first grades and the high school years. First grade or kindergarten are recommended because if these children show positive reactions they have, in all probability, been exposed in their own homes. In certain areas where many children do not go beyond the eighth grade, it may be well to include the eighth grade in these surveys. No school program of this type should be undertaken unless funds are available to provide x-ray films of the chest for all the positive reactors, and personnel is available to visit the contacts of the positive reacting children. The child himself is only the means of gaining admission to the home to discover the causative case. The picture changes somewhat by the time the high school age group is reached. In this age group, morbidity begins to increase and a percentage of cases may be expected in high schools surveyed. But again provision should be made for check-up on home contacts. It is not advisable to do, or urge to be done, a school tuberculin testing survey merely for the sake of tuberculin testing or for the production of reports and records.

It is understood that any program undertaken in schools should be preceded by educational work which may include talks and motion picture showings to Parent-Teacher Associations and high school students. It is felt that teachers, parents and students should know what a tuberculin test is, and the purpose of the test.

Naturally, the homes of all positive reactors in any school program, whether confined to kindergarten or first grade, or including high school, should be kept under observation. Reactors themselves should be x-rayed and re-checked annually thereafter by x-ray. It is not necessary to repeat the tuberculin test in the case of the positive reactors. Doubtful reactors should be re-tested. A search should be made for the possible source case, and the contact with such case should be broken.

Teacher Observation

A sick child should not be in school. It is important to detect the child who is ill, particularly a child who is ill with a communicabe disease, at the earliest possible moment. For the detection of such illness the primary responsibility must rest upon the teacher, working under the leadership of, and according to principles developed with, the medical and nursing service. At the beginning of a school year or school term, and in the presence of cases of disease, the observation of the child's departure from normal health should be made with particular care. This is true for the teacher in the secondary school as well as in the elementary school. Too much time is likely to be spent in re-admitting students to school after illness, and insufficient time in screening out children who are coming down with an ailment.

Procedures for Exclusion

- 1. The teacher should notify the principal of suspected cases of communicable disease.
- 2. The principal should issue an exclusion order. Exclusion is the responsibility of the school authorities, but the procedures followed can include the use of the public health nurse or school physician, with or without review by the principal in individual cases, providing that the relationship and responsibility of the public health nurse or school physician is definitely understood. Exclusion should not await the decision of the public health nurse or the physician if this would result in continued contact between well students and suspected cases of illness.
- 3. The excluded pupil should be sent home with a notification to the parents as to the reason for exclusion, and a report should be made to the health department in cases of suspected communicable diseases. Such reporting is the responsibility of the school principal.
- 4. A sick pupil, particularly in the younger age group, should not be sent home alone, but should be accompanied by another individual, or the parents should be notified and the pupil held until the parent or another responsible person calls for him. However, when sick pupils are held at the school, proper isolation should be established. If a young child who is sick is sent home, there should be assurance that some member of his family is at home to receive him or that other responsible persons will be in charge of the pupil after he leaves the school.
- 5. Whether the excluded student walks to his home or uses some other form of transportation should depend upon the degree of illness. Assurance should be obtained that he will go directly home.
- 6. Exclusion depends upon suspected illness and symptoms; not upon a diagnosis.

Procedures for Readmission

It is fundamental that a child should not return to school if he is likely to infect others. It is not always easy to determine when a child has ceased to disseminate virulent organisms.

If the State or local health department regulations specify the conditions under which a child should be isolated, these should be followed. For

quarantinable diseases release and re-admission to school frequently depend upon a physician's certificate.

There are many conditions such as impetigo, scabies, chickenpox, measles and colds, in which current practice in many areas has permitted the re-admission of pupils without a physician's certificate. The recommendations for re-admission of the State Department of Public Health should be followed.

The Immunization Program

- 1. Each local area should establish an immunization program according to local needs. Smallpox and diphtheria immunizations should be carried out in every community, and typhoid immunizations performed where needed after due consultation with the local health department.
- 2. A standardized immunization technique should be adopted, based upon the immunization recommendations of the State Department of Public Health.

Procedures Recommended in Case of Epidemics

- 1. With respect to epidemics, school authorities should follow the recommendations of State and local health agencies which are officially charged with the responsibility for communicable disease control. Schools should not be closed except upon advice of the local health officer.
- 2. During an epidemic local health authorities should make a special effort to acquaint school authorities and personnel with all of the procedures to be followed and with the reasons for such procedures.

VI. Safety and First Aid

School boards are liable for school accidents where there is evidence of neglect on the part of school officials. It would be desirable to have all school accidents reported on a standard form to the county superintendent of schools. All school and playground equipment should be regularly inspected. A planned safety program should be in operation in every school.

One person in every school should be responsible for the administration of first aid in the absence of the nurse or physician. It may be the principal, the physical education teacher, or any interested person who has had special training in this field and is available at all times. Alternates should be appointed in advance.

The first aid equipment need not be extensive. Standard equipment recommended by the American Red Cross or the equivalent of that equipment is satisfactory. A list of minimum equipment which will prove satisfactory for situations which frequently occur includes: tongue depressors, cotton, sterile gauze dressings with adhesive tape for application, gauze squares, adhesive tape, soda and water paste for burns, alcohol, green soap, scissors, boric acid, thermometer, ammonia and any standard form of antiseptic.

The Health of the Teacher and Other School Employees

The Pre-employment Examination of Teachers and Other School

Employees—The In-service Examination of Teachers and Other
School Employees— School Employees and Communicable Diseases

—Recommendations for Sick Leave of Teachers—Salary, Tenure
and Retirement Benefits for Teachers—Group Health Insurance for
Teachers—Other Items Affecting the Health of the Teacher.

I. The Pre-Employment Examination of Teachers and Other School Employees

No school employee or teacher who is not in good physical condition and free from communicable disease should be permitted to work in direct contact with the boys and girls of the State. No teacher should be granted a certificate for the first time, and no other school employee should be engaged for the first time, who does not submit a health certificate from a physician licensed to practice medicine in all of its branches in the State of Illinois.

The law states that no teacher shall be certificated to teach in the schools of the State who is not in good health. Surely the examination procedure is a good way to find out whether the teacher is in good health or not. The following examination form, which is used by the Illinois State Teachers' Examining Board, is recommended to local school systems for use with all school employees:

FORM H

HEALTH EXAMINATION RECORD

Illinois State Examining Board for Teachers' Certificates

TEACHERS' EXAMINING BOARD

Office of the Superintendent of Public Instruction

Name		Address_			
	First				
Married	Single_	Widow	Sex	Age	
Height	Weight	Color of Eyes	C	olor of Hair	

REPORT OF PHYSICAL EXAMINATION

1.	General Physical Condition:
2.	Vision (Near) Vision (Near) Correctible to
	Right (Distance) Left (Distance) Right Left
3.	Hearing: Right Left Nose and Throat
	Case History
4.	Vaccination Immunization: Diphtheria
	Teeth Heart Blood Pressure: Systolic Diastolic
	PulseSkinSkin
	Thyroid Superficial Glands Varicose Veins
5.	Respiratory System Any known or suspected tuberculosis
	in home Tuberculin TestWhen Given
	Negative Positive If positive was X-ray taken
	Result:
6.	Kahn Test: Positive Negative Date Test was made:
	Urinalysis: Reaction Specific Gravity Albumen
	Sugar Pus Blood Casts
7.	Summary of Defects
	To the Examining Physician: The objective of this health examination is to aid us in the certification of teachers who are physically fit to be associated with young people. We hope you will keep in mind the various diseases and defects that would endanger the health of the child in the classroom.
	I hereby certify that I have examined the above applicant and that the above is a complete and accurate record of such examination.
	Date of Examination(Signed)M.D.
	Date of Examination(Signed), Illinois

Note: It is recommended smallpox vaccination be made every five years. No certificate will be issued to any person who does not file with the State Teachers' Examining Board a certificate of health properly certified to by a competent physician.

To the Examining Physician: If applicant shows positive reaction to Kahn Test your recommendation as to whether disease is in a communicable stage or not is required.

If Tuberculin test is positive X-ray must be required before your final recommendation is made.

Please give full description of any physical disability not herein included on reverse side of sheet.

II. The In-Service Examination of Teachers and Other School Employees

In order to make the health program more effective, school boards should adopt a policy requiring teachers and other school employees to be re-examined at regular intervals. In the in-service examination program, the

same form should be used as is shown on the preceding page.

All infomation contained in the health examination of teachers and other school employees should be regarded as strictly confidential, and the detailed health records should remain in the custody of the examining physician. Each teacher and other school employee should present *annually* to the school board a certificate of physical fitness signed by a physician licensed in Illinois to practice medicine in all of its branches. The following form is recommended, item A being answered every year and item B every other year:

HEALTH CERTIFICATE

TIDALIII CERTIFICATE
A. Report of General Physical Examination
I have today completed a general examination of, including the items specified on Form H of the Illinois State Teachers' Examining Board, and find (him)* (her)* (not)* in good health and (free)* (not free)* from communicable disease.
Signed, M.D.
B. Report of chest x-ray examination (every second year) A (single)* (stereoscopic)* x-ray examination was made of the above
named person on date at
Signature
(For laboratory taking film.)
Review of film: Active tuberculosis is (absent)* (present)*.
Roentgenologist and/or

Roentgenologist and/or Tuberculosis Consultant.

In cases of emergency, such as an epidemic, the teacher and other school employees should follow the same procedures as established for the pupils. Unusual situations may arise and school boards may require re-examinations at any time. In these cases, procedures should be established to meet a particular situation with the full knowledge of the teacher and the school board. In making a decision, school boards should be guided by the advice of a physician or health officer.

It is suggested that where the employing board specifies the physician, the board should be expected to pay for the examination. If the employee, on the other hand, wishes to select his own physician, he should pay for the examination. It seems clear that the school board has legal authority to prevent school employees and teachers who are mentally unfit from remaining in contact with school children. It is recommended that precautionary meas-

[·] Cross out words not applicable.

ures and such examinations as are needed be carried out to see that such school employees and teachers no longer remain in service.

III. School Employees and Communicable Diseases

General

Communicable diseases can be contracted by the school employee from the pupils and by the pupils from the employee. The employees are usually immune to the minor communicable childhood diseases because most adults have had them. Every employee should be immunized against diphtheria and should be vaccinated against smallpox every five years.

School Employees and Tuberculosis

- 1. Every school employee should present evidence of freedom from pulmonary tuberculosis before entering upon his duties, and every second year thereafter. One or more chest x-rays, interpreted by a qualified physician and found to reveal no evidence of active pulmonary tuberculosis, should be considered as sufficient proof of freedom from tuberculosis.
- 2. X-rays of school employees should be taken by physicians, hospitals, clinics or sanatoria with adequate facilities to produce films of diagnostic quality. When, in the opinion of the interpreting physician, a film is not of proper quality, the laboratory that took the film or films should be asked to repeat the examination at no additional cost.
- 3. X-rays of school employees should be interpreted by either a qualified roentgenologist or a qualified tuberculosis specialist. Roentgenologists who are Diplomates of the American Board of Radiology practicing in Illinois, Medical Directors of Illinois tuberculosis sanatoria, the Director of the Division of Tuberculosis Control of the Illinois Department of Public Health, and such other physicians as are designated by committees of the Illinois Chapter of the American Trudeau Society and the Illinois Chapter of the College of Chest Physicians, should be considered properly qualified.
- 4. The school board should arrange to make these examinations available to every employee at no cost. It should be considered a legitimate expenditure to use school tax funds for the examination of school personnel to make sure that all are free from tuberculosis. It is suggested that where taxes are being collected for tuberculosis control under the Glackin Act,* the school board arrange for these examinations with the Sanatorium Board administering such tuberculosis funds. It is furthermore possible, in some instances, to get funds for these examinations from Tuberculosis Associations or other sources.
- 5. The following procedures should be carried out with school employees having tuberculosis:
 - a. Any employee found to have active tuberculosis on the initial examination should not be permitted to render service until

^{*} Illinois Revised Statutes, Chapter 34, Section 164-175.

the disease has been properly treated and is called arrested in terms of the definition given by the National Tuberculosis Association.

- b. Any employee found to have active tuberculosis on a reexamination should be given a leave of absence, in accordance with the ruling of the board, for such a reasonable period of time as is ordinarily deemed necessary to arrest the disease.
- c. An employee who has had active tuberculosis, who has undergone treatment and in whom the disease has become inactive and arrested, should be re-employed without discrimination other than that he or she have chest x-rays and such other examinations as often as are deemed necessary by a qualified tuberculosis physician. The cost of these additional examinations should be paid for by the individual.
- d. Employees who have had tuberculosis and in whom the disease is inactive should be recommended for new positions or promotions without prejudice on this account.

IV. Recommendations for Sick Leave of Teachers

For the reason that salaries are low in most cases, the teacher feels that she cannot afford to remain away from her work with loss of pay. Consequently, if there is no sick leave with pay given by the school board, she will very often work when she is ill, endangering her own health, and in many cases, the health of her pupils.

It would, therefore, seem advisable that boards give careful consideration to sick leave with pay. The general practice at the present time is to allow five to ten days per school year, cumulative to twenty days. In most cases, death in the immediate family is included in this allowance.

V. Salary, Tenure and Retirement Benefits for Teachers

Since the health of teachers is directly related to the amount of security provided for them and the compensation received, it is recommended:

- 1. That school systems throughout the State adopt a salary schedule suitable to their size and income and guaranteeing an adequate standard of living for teachers.
- 2. That the tenure law be recognized as making a contribution to the security of the teacher.
- 3. That an adequate retirement plan be recognized as contributing to the welfare of the teacher and the school by providing opportunity for retirement because of disability, ill health, or advanced age.
- 4. That the lay public be given sufficient information on salary and tax assessment variations throughout the State to insure public support of educational measures.
- 5. That State aid be increased for districts not able at present to pay adequate salaries, and to improve educational programs and standards.

VI. Group Health Insurance for Teachers

Teachers should be urged to consider the advantages of group health and accident insurance and a hospitalization plan. The final decision as to whether the teacher will or will not participate in any such insurance or plan should be left entirely up to the teacher.

VII. Other Items Affecting the Health of the Teacher

Housing and School Facilities

The housing of teachers may be a rather serious problem, especially in rural areas and in congested suburban areas in this State. However, this is a local problem and must be left to the local community to solve.

Special attention should be given to school heating and ventilation as well as proper lighting. Many teachers are forced to face the light while teaching. Adequate rest rooms at schools should be provided for the teachers.

Extra-School Assignments

In many schools the teacher has too heavy a teaching load. Extra duties are assigned to her such as dramatics, choral work, and club work. Most of these activities are very much worthwhile, and should be carried on in the school. However, they should not be the responsibility of only a few teachers. Unless there is a general plan throughout the school for distributing evenly this extra-curricular work, teachers should be compensated for such extra duties. The school board should call the attention of the public to the fact that the primary function of the teacher is to educate her pupils, and that demands by the community on the teacher's time, energy and resources, which interfere with teaching, are to be discouraged.

In-Service Study

School boards should not require in-service studies to the extent that they may impair the health of the teacher.

Opportunity to Work in the School Building at the End of the School Day

The teacher should have the privilege of working in the school room at least thirty minutes after the close of school.

Supervision

It is recognized that the quality of supervision which teachers receive is related to their mental health.

In-Service Training in Health and Health Education for Teachers

Supervision and Consultation—Summer Health Education Workshops—Extension Courses—Short Institutes—Reading Circles—Visitations—The School Health Committee.

I. Policies

Many teachers have not had the privilege of recent health education preparation. Everyone is aware of the tremendous load the teacher carries. It is with the hope of providing guidance that in-service training is suggested as one method of better equipping the teachers for the important task ahead.

Teachers undoubtedly will welcome effective, practical help from those who have something to give. In-service training provides such an opportunity. Community conditions and needs, parent-school relationships, health status, immediate and contributing environmental factors, the previous training of teachers and other factors must all be considered.

II. Desirable Procedures

In-Service Health Education Through Supervision and Consultation

This means that direct help will be given to the teachers "on-the-job" by those who are particularly well-qualified. This assistance will be highly individualized.

- 1. Direct aid from a well-qualified supervisor of health education is an ideal method of in-service training where it is available.
- 2. Health consultants, such as doctors, dentists, public health nurses, nutritionists, and home advisers, may be of great assistance in the training of teachers in almost all phases of the school health program.
- 3. Conferences of teachers with nurses, engineers or other qualified persons concerning environmental problems are worthwhile.
- 4. Meetings where teachers (both large and small groups) and health consultants discuss suitable health activities and health materials are profitable. Health councils with teacher, student, parent, and health consultant membership have been formed to good advantage in some schools.
- 5. Conferences between the nurse and teacher provide an excellent opportunity for the teacher to learn more about individual children and about the health problems of her school. Whenever possible, time for this conference should be provided in the teacher's schedule.
- 6. Doctor, dentist, and nurse examination of students with teacher and parents present provide an excellent opportunity for establishing desirable health attitudes and developing additional health knowledge. A teacher also learns about her pupils through being present when such health examinations are performed.

Summer Health Education Workshops

A workshop is not a lecture class. It is a plan devised to help each participant arrive at solutions of particular problems or at better understandings of felt or discovered needs. In a workshop, where teachers are free from the pressure of three or four courses, all of which require extensive reading and term papers, they have time to plan related, adaptable, timely outlines which serve as a basis for the direction the curriculum will take for their own students. The particular problem or problems to be attacked in the workshop should be determined through cooperative planning between the participants, consultants and other resource people.

The following suggested procedures for developing workshops may be helpful:

- 1. It is desirable that the initiation of the program should come from a local group of teachers under the leadership of (a) the local school administrator (the county or city superintendent of schools or the village principal) or (b) the county or city health officer.
- 2. The permission of the local board of education, in whose area the workshop is to be organized, should be obtained for the use of buildings and grounds.
- 3. A nearby teachers' college, liberal arts college, or university may be requested to furnish instruction and assistance, as may suitable representatives of the State or local health departments and other qualified persons.
- 4. Wherever possible, the workshop should operate in such a way that the teacher will receive some form of academic credit for the work. Teachers who do not desire credit, and who are willing to work without the credit incentive, should not be excluded from participation.
- 5. The daily program should be flexible to permit efficient use of time so that needed visitations, excursions, and inspections can be made.
- 6. Whenever possible, the workshop should be run continuously; that is, from one day to the next, rather than be called once each week for a series of meetings. Continuous and fulltime work on a workshop problem promotes efficiency and continuity of work. This would suggest that the best workshops can probably be organized during vacation periods. The length of time the workshop is to run will depend upon the amount of credit to be given.

Extension Courses

Whenever possible, extension courses should be organized around group needs. The following areas need consideration: nutrition, physical education, personal and community hygiene, growth and development, and techniques for recognizing departures from normal health.

Short Institutes (Held Locally) on School Health or Health Education

Such institutes would help teachers to see the great possibilities in health education. Plans for various kinds of activities, suggested procedures, discussion of scientifically sound books, and scientific data presented in a dynamic, challenging fashion, might well be offered.

At a meeting of this type, held on a regular institute day as now provided in each county, qualified speakers might discuss such topics as:

- 1. The teacher's health and grooming in relation to successful teaching.
 - 2. Nutrition and learning.
 - 3. Recognition of departures from normal health.
 - 4. The danger of false emphasis on perfect attendance.
- 5. The local, county and State health departments and their relation to the school.

A series of appropriate motion pictures on health subjects might also be shown.

In-Service Training Through Teachers' Reading Circles or Through Making Health Education Materials Available to Teachers

The local county and State departments of public health provide excellent educational aids of many kinds. The school health committee, or some teacher in the school, should feel responsible for securing as much help as possible from these departments.

Perhaps a committee composed of representatives from several schools in a county could be set up to evaluate material available from many sources.

Visitations to Other Communities, Health Centers and Clinics

Alert teachers welcome the opportunity of visiting other areas where effective work is being carried on. Such visitation should provide not only an opportunity for discussion between the visitors and those concerned with the plan that is being studied, but it should also include a report to fellow teachers at home about what was observed.

School Health Committee

At the beginning of this report suggestions were made for the organization of a committee in the school system to develop specific plans and curricula in health education. Participation in the work of such a program planning committee is a highly educational process for those teachers who participate.

Illinois Joint Committee on School Health

Developed with the approval of GOVERNOR DWIGHT H. GREEN

and organized October 29, 1943, under the leadership of

ROLAND R. CROSS, M.D., Chairman, Director of the Department of Public Health VERNON L. NICKELL, Superintendent of Public Instruction

FRANK G. THOMPSON, Director of the Department of Registration and Education

with the consultant services of

CLAIR E. TURNER, A.M., Ed.M., D.Sc., Dr.P.H., Professor of Public Health, Massachusetts Institute of Technology, Cambridge.

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Representatives Agencies State Department of Public Health *Dr. Allan J. McLaughlin, Medical Administrative Consultant. *Mrs. Leona East, Chief, Division of Public Health Instruction, Springfield. *Dr. Howard W. Lundy, Division of Public Health Instruction, Springfield. Mr. B. K. Richardson, Senior Administrative Officer, Springfield. State Office of Public Instruction *Mr. Ray O. Duncan, Director of Health and Physical Education, Springfield. State Department of Registration and Education *Mr. Elmer P. Hitter, Coordinator, Teachers College Division, Springfield. Illinois State Normal University...... Dr. R. W. Fairchild, President, Normal. *Dr. Rose Parker, Director of Special Education, Normal. Southern Illinois Normal University . . . Dr. Bruce W. Merwin, Acting President, Carbondale. ‡Dr. Roscoe Pulliam, President, Carbondale. *Dr. Marie Hinrichs, Professor of Physiology and Health Education, Carbondale. Northern Illinois State Teachers Dr. Karl L. Adams, President, DeKalb. *Mr. O. M. Chute, Director of Training, College..... DeKalb. *Dr. Charles E. Howell, Professor of Social Science, DeKalb. Eastern Illinois State Teachers College. Dr. Robert G. Buzzard, President, Charleston. *Dr. Harold M. Cavins, Associate Professor of Hygiene, Charleston. Western Illinois State Teachers Dr. F. A. Beu, President, Macomb. *Dr. Fred H. Currens, Dean of the Faculty, College Macomb. University of Illinois..... Dr. A. C. Willard, President, Urbana. *Dr. George T. Stafford, Professor of Physical Education, Urbana. Agricultural Extension Service. University of Illinois..... Miss Fannie Brooks, R.N., Health Education Specialist, Urbana. Illinois Commission for Handicapped Children *Mr. Lawrence J. Linck, Executive Director, 211 West Wacker Drive, Chicago. Institute for Juvenile Research, State Department of Public Welfare..... Dr. Richard L. Jenkins, Acting Superintendent, 907 South Wolcott Avenue, Chicago. Dr. Paul L. Schroeder, Former Superintend-

County Superintendent of Schools..... Mr. Ruel Hall, Kankakee.

ent, 907 South Wolcott Avenue, Chicago.

[•] Member of Liaison Committee. † Deceased, March 27, 1944.

Agencies	Representatives
	. Mr. Robert M. Cole, Executive Director, First National Bank Building, Springfield.
Illinois City Superintendents' Association	Mr. H. B. Black, President; Superintendent of Schools, Mattoon.
Illinois Congress of Parents and Teachers	. Mrs. Everett F. Butler, State Health Chairman, Box 192, Alton.
Illinois Dietetic Association	Miss Marie Dohm, Chairman, Community Education Section; Nutritionist, Cook County Public Health Unit, 737 South Wolcott Avenue, Chicago.
Illinois Education Association	Mr. Irving F. Pearson, Executive Secretary, 100 East Edwards Street, Springfield. §Mr. Lester R. Grimm, Research Director, 100 East Edwards Street, Springfield.
Illinois High School Principals' Association	Mr. Lyman K. Davis, Principal, Springfield High School.
Illinois Home Economics Association	Dr. Adelaide Spohn, Nutritionist, Elizabeth McCormick Memorial Fund, 848 North Dearborn Street, Chicago.
Illinois Physical Education Association.	.*Dr. C. O. Jackson, Professor of Physical Education, University of Illinois, Urbana.
Illinois Public Health Association	Dr. E. A. Piszczek, Secretary; Director, Cook County Public Health Unit, 737 South Wol- cott Avenue, Chicago.
Illinois State Dental Society	Dr. Lloyd C. Blackman, 702 Professional Building, Elgin. Dr. L. H. Johnson, 304 West Armstrong Street, Peoria.
Illinois State Medical Society	Dr. James H. Hutton, State Board of Public Health Advisors, 30 North Michigan Blvd., Chicago.
Illinois State Nurses Association	Miss Sarah Daily, R.N., President, 8 South Michigan Avenue, Chicago.
Illinois Statewide Public Health Committee	Mrs. Guy A. Tawney, Co-Chairman, 502 West Main Street, Urbana.
Iliinois Tuberculosis Association	Mr. W. P. Shahan, Executive Secretary, First National Bank Building, Springfield.
Chicago Board of Education	 Dr. William H. Johnson, Superintendent of Schools, Chicago. *Mr. A. H. Pritzlaff, Director of Physical Edu- cation, Chicago.
Chicago Board of Health	Dr. Herman N. Bundesen, President, 54 West Hubbard Street, Chicago.

U. S. Public Health Service Advisor:

DR. MAYHEW DERRYBERRY, Chief, Field Activities in Health Education, Washington, D. C.

^{*} Member of Liaison Committee. § Chairman of Liaison Committee.

Membership of Subcommittees

Ex-officio Members of All Subcommittees

- MR. O. R. BARKDOLL, Assistant Director of Health and Physical Education, Office of the Illinois Superintendent of Public Instruction, Centennial Building, Springfield.
- *MR. RAY O. DUNCAN, Director of Health and Physical Education, Office of the Illinois Superintendent of Public Instruction, Centennial Building, Springfield.
- *Mrs. Leona East, Chief, Division of Public Health Instruction, Illinois Department of Public Health, Capitol, Springfield.
- *MR. ELMER P. HITTER, Coordinator, Division of Teachers' Colleges, Illinois Depart ment of Registration and Education, Springfield.
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- MR. B. K. RICHARDSON, Senior Administrative Officer, Illinois Department of Public Health, Capitol, Springfield.
- MISS ELSA SCHNEIDER, Assistant Director of Health and Physical Education, Office of the Illinois Superintendent of Public Instruction, Centennial Building, Springfield.

SUBCOMMITTEES ON THE SCHOOL HEALTH PROGRAM IN PRIMARY AND SECONDARY SCHOOLS

Underlying Principles Relating to Administration, Educational Procedures, and Cooperative Relationships.

CHAIRMAN:

MR. R. V. JORDAN, City Superintendent of Elementary Schools, Centralia.

MEMBERS:

- *MR. RAY O. DUNGAN, Director of Health and Physical Education, Office of the Illinois Superintendent of Public Instruction, Centennial Building, Springfield.
- *Mrs. Leona East, Chief, Division of Public Health Instruction, Illinois Department of Public Health, Capitol, Springfield.
- Dr. E. H. Mellon, City Superintendent of Elementary and High Schools, 601 West John Street, Champaign.
- Dr. Sumner M. Miller, Commissioner of Health of the City of Peoria, and Peoria County Defense Zone Health Officer, City Hall, Peoria.

Specific Objectives.

CHAIRMAN:

Dr. Parker Dooley, Assistant Professor of Pediatrics, University of Chicago, 950 East 59th Street, Chicago.

MEMBERS:

- Dr. R. V. Brokaw, Chief, Division of Cancer Control, Illinois Department of Public Health, 505 South Fifth Street, Champaign.
- MISS MAUDE B. CARSON, R.N., Chief, Division of Public Health Nursing, Illinois Department of Public Health, 2161/2 East Monroe Street, Springfield.
- Mr. Carl Gross, Principal Sanitary Engineer in Charge of Sewage and Stream Pollution, Division of Sanitary Engineering, Illinois Department of Public Health, Capitol, Springfield.

^{*} Member of Liaison Committee.

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Dr. L. H. JOHNSON, Illinois State Dental Society, 304 West Armstrong Street, Peoria.

MISS LEONE PAZOUREK, Nutrition Consultant, Division of Maternal and Child Hygiene, Illinois Department of Public Health, 212 West Monroe Street, Springfield.

*Professor George T. Stafford, Department of Physical Education, University of Illinois, Urbana.

MISS LOUISE SULLIVAN, Health Education Director, Joliet Grade Schools, 909 Oneida Street, Joliet.

Healthful School Environment.

CHAIRMAN:

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MR. EDWARD H. STULLKEN, Principal, Montefiore Special School, 655 West Fourteenth Street, Chicago.

^{*} Member of Liaison Committee.

Organization of the Student Day in the Interest of the Mental and Physical Health of the Pupil

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Dr. Paul L. Schroeder, Institute for Juvenile Research, 907 South Wolcott Avenue, Chicago.

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MR. ROBERT COLE, Executive Director, Illinois Association of School Boards, First National Bank Building, Springfield.

§Mr. Lester R. Grimm, Research Director, Illinois Education Association, 100 East Edwards Street, Springfield.

Dr. RICHARD L. JENKINS, Institute for Juvenile Research, 907 South Wolcott Avenue, Chicago.

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- Dr. Milton H. Kronenberg, Chief, Division of Industrial Hygiene, Illinois Department of Public Health, 1800 West Fillmore Street, Chicago.
- Dr. David F. Loewen, Medical Director and Supérintendent, Macon County Tuberculosis Sanatorium, 400 West Hay Street, Decatur.
- Dr. Paul L. Schroeder, Institute for Juvenile Research, 907 South Wolcott Avenue, Chicago.
- Miss Florence Wolfe, Science Teacher, Joliet Township High School and Junior College, Joliet.

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CHAIRMAN:

Student Health Service.

*Dr. Marie Hinrichs, Professor of Physiology and Hygiene, Head of Department, and College Physician, Southern Illinois Normal University, Carbondale...

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- Dr. Richard F. Boyd, Chief, Division of Local Health Administration, Illinois Department of Public Health, 216½ East Monroe Street, Springfield.
- MISS RACHEL JACKSON, R.N., Northern Illinois State Teachers College, DeKalb.
- Dr. RICHARD L. JENKINS, Institute for Juvenile Research, 907 South Wolcott Avenue, Chicago.
- DR. CLIFFORD PEARCE, Western Illinois State Teachers College, Macomb.
- Dr. Paul L. Schroeder, Institute for Juvenile Research, 907 South Wolcott Avenue, Chicago.
- Dr. Olga Sirola, College Physician, Western Illinois State Teachers College, Macomb.
- MISS MARY E. THOMPSON, R.N., Eastern Illinois State Teachers College, Charleston.
- Miss Lucy K. Woody, Dean of Women, Southern Illinois Normal University, Carbondale.

CHAIRMAN:

Hygienic Regimen.

Dr. Olga Sirola, College Physician, Western Illinois State Teachers College, Macomb.

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- Miss Anna L. Simpson, Student, Northern Illinois State Teachers College, DeKalb.
- Miss Leone Ware, R.N., Division of Public Health Nursing, Illinois Department of Public Health, 2161/2 East Monroe Street, Springfield.

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- Miss Alice M. Heath, Director of Health Education, Peoria County Tuberculosis Association, 229 South Jefferson Avenue, Peoria.
- *Dr. Charles E. Howell, Professor of Social Science, Northern Illinois State Teachers College, DeKalb.
- Dr. L. H. Johnson, Illinois State Dental Society, 304 West Armstrong Street, Peoria.
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